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In an attempt to identify, synthesize, and evaluate shared services research and development efforts conducted throughout the nation, and bring those results together in a single report, Part One of a four-part report defines rural shared services and the organizational patterns under which shared service activity exists, describes the activities which focus on the needs of pupils and teachers, outlines activities which facilitate the educational program, and assesses the effects of sharing services. The report concludes that: (1) shared services have improved measurable human behavior in those studies which were controlled and subjected to effectiveness measurement; (2) of the 215 projects studied, each can now demonstrate expanded educational services; (3) cooperative purchasing and sharing services can provide materials and services at a lower per capita cost; (4) shared services can demonstrate an improvement in the quality of education within schools with no loss of autonomy by the local district; (5) shared service activity has little effect on whether districts do or do not reorganize; and (6) there is a recognized need for a more highly developed channel of communication among rural educators. Related documents are RC 003 403, RC 003 404, and RC 003 405. (DK)

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Project Report

Part One
Final Report for Phase I

RURAL SHARED SERVICES

An interpretative study
conducted by

Northwest Regional Educational Laboratory
with
Northern Montana College

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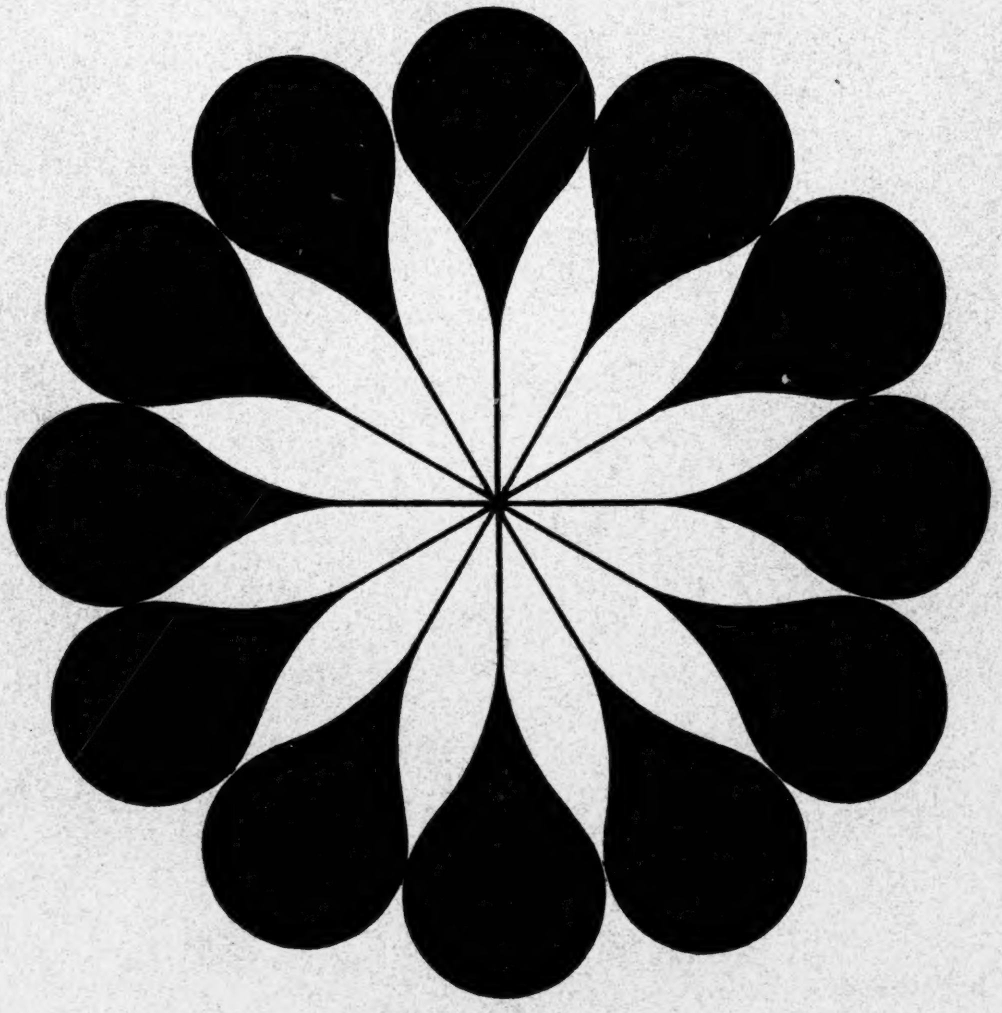

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Project Report

Part One
Final Report for Phase I

RURAL SHARED SERVICES

Identification, Synthesis, Evaluation and Packaging of "Shared Service" Research and Developmental Efforts in Rural Areas

An interpretative study conducted under
U. S. Office of Education contract
OEC-0-8080583-4532 (010) by

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April 1969

The research reported herein was performed pursuant to a contract with the United States Department of Health, Education, and Welfare, Office of Education.

FOREWORD

On June 21, 1968, the Northwest Regional Educational Laboratory and Northern Montana College undertook the Rural Shared Services project to identify, synthesize, evaluate and plan dissemination of information which would be valuable to opinion leaders and change agents in rural communities. Phase I, which was completed on April 21, 1969, resulted in a four-part report.

Part One, titled "Project Report," defines rural shared services and the organizational patterns under which shared service activity exists, describes the activities which focus on the needs of pupils and teachers, outlines activities which facilitate the educational program, and assesses the effects of sharing services.

Part Two, "Annotated Bibliography," reviews sixty-eight publications describing rural shared service concepts. These were selected from more than 200 by leaders in rural education who participated in the project.

Part Three, "Location of Shared Services," provides information on 215 shared service projects in 48 states.

Part Four, "Dissemination Strategies and Devices," examines potential methods of dissemination for Phase II of the project.

To obtain information for this report, materials and publications which have resulted from such regional projects as the Catskills, Rocky Mountain, Texas, Western States and Upper Midwest Small Schools Projects were collected. To supplement this information, each college with a department of rural sociology, each State Department of Education and each regional accrediting association was contacted and invited to identify cooperative endeavors in their service areas. Projects, once identified, were written and asked for descriptions of their shared service activities. In addition, literature related to rural education was reviewed and a bibliography assembled.

Leaders in rural education then were assembled to review and evaluate literature and findings, identify field sites where shared service programs were believed most successful, and analyze shared service programs within the regional projects.

Subsequently, project staff members visited projects in Oregon, Washingto
Idaho, Montana, Colorado, Utah, Nevada, New Mexico, West Virginia, Tennessee, Georgia, North Dakota, Minnesota, Wisconsin, Texas and New York to collect first-hand information.

The result of this phase of the project is the compilation of dependable and useful information on one of the primary methods of improving instruction in rural schools.

RJ FLH

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CHAPTER I

RURAL SHARED SERVICES

> Since this movement is so active and is assuming such large proportions it would seem advisable to learn something of its extent and the types of activities involved.
>
> --J. H. Moyer--[1]

Since World War II many changes have been introduced in American education. Results of these changes are destined to have a long-range effect on those who will emerge as tomorrow's leaders. Among the changes which appear to have been readily accepted by citizens of rural America is the recent adaptation and widespread adoption of that behavior referred to as Shared Service. Shared Service is more than change--it is the vehicle by which access to quality education and equality of educational opportunity is being carried to youth, who, by circumstance of residence, are required to attend schools with limited enrollments, limited facilities, often poorly prepared teachers, and more often limited course offerings.

The Northwest Regional Educational Laboratory, Portland, Oregon, in March 1968, submitted to the Research Utilization Branch, Bureau of Research, of the U. S. Office of Education a proposal to:

(1) identify and analyze key research and development reports growing out of major regional efforts dealing with shared services;
(2) interpret and translate the existing information into clear, concise and scientifically respectable reports which are easily retrievable through data processing methods, and

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[1] J. H. Moyer, speaking of the activities of "Circuit Teachers." Bulletin of the Department of Rural Education, (February 1934) 29-34.

(3) prepare a model to disseminate these information packages to opinion leaders and change agents in rural communities.[1]

As a consequence of that proposal, the investigation reported here has as its purpose the examination of what is happening under the shared services umbrella.

Organization of This Report

This report is divided into five categories. The remainder of Chapter I provides some of the background necessary for placing a discussion of rural education in context. Chapter II deals briefly with the administrative arrangements which have been designed to implement the shared services concept.

A model for discussion of the variety of services provided through shared activity was provided by Robert M. Isenberg. Isenberg found he could adequately group these educational functions under three broad headings: (1) Services Focused on the Needs of Pupils; (2) Services to Help Teachers Meet the Needs of Pupils, and (3) Services to Facilitate the Educational Program.[2] Accordingly, a chapter in this report will be devoted to each of these three categories. Additionally, Chapter VI will review the statistical evidence relating to the outcomes of shared services projects, while Chapter VII offers the writer's view of implications of rural shared services to education in rural America.

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[1] Ray Jongeward, Rural Shared Services: A Project Proposal. Portland, Oregon: Northwest Regional Educational Laboratory, March 1968, p. 4.

[2] Robert M. Isenberg, The Community School and the Intermediate Unit: Yearbook 1954. Washington, D. C.: Department of Rural Education, National Education Association, 1954, p. v.

Three supplements to this report, each under separate cover, provide an Annotated Bibliography of Rural Shared Services, A description of Dissemination Strategies and Devices, and Locations Where Shared Services Exist. Included in the latter document are project titles, addresses and annotated descriptions of the projects and their activities.

The Setting

The title of this investigation focuses upon rural education as well as the shared service concept. It would seem appropriate to define what is included when use is made of the term. However, examination of the information collected causes one to regard as unnecessary any specific definition of rural. In fact, Jane Franseth, newly appointed Product Manager for Rural Education Activities of the U. S. Office of Education, has stated:

> The changing nature of what has traditionally been labeled rural is so great that in many respects old and familiar terms are no longer appropriate. Since many aspects of rural and urban life are similar, it is difficult to determine if a specific definition of rural is any longer useful.[1]

If we are not to define rural education in terms of what it is, then perhaps a discussion of what it is not is in order. Although the expression evokes images of the "little red school house," this view is no longer defensible. With a reduction in the number of school districts from 127,529 in 1932 to 23,390 in 1967,[2] and the concurrent development of pupil transportation systems, it becomes evident that very few one-room schools are still operational. Table I provides the number of such one-room schools as well as indicating the trend for this unit.

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[1] Jane Franseth, Supervision in Rural Schools. Washington, D. C.: U. S. Office of Education, Bulletin No. 24, 1965, p. 2.

[2] U. S. Department of Commerce, Governmental Organization: 1967 Census of Governments. Washington, D. C.: U. S. Government Printing Office, 1968, p. 12.

Table I NUMBER OF ONE-ROOM SCHOOLS IN SELECTED YEARS[1]

1917-18	196,037
1927-28	156,066
1937-38	121,340
1947-48	74,844
1957-58	25,200
1963-64	9,895
1965-66	6,491

To place subsequent discussion of shared service efforts in proper perspective, notice should be made of the fact that in 1965-66 more than seventy-five percent (77.4%) of those 6,491 one-room units could be located in eight states:

Nebraska	1,413
South Dakota	1,258
Minnesota	748
Kentucky	422
Montana	382
Michigan	318
North Dakota	271
West Virginia	213
	5,025

Undoubtedly, there will always be some one-room units because of geographic and economic considerations, but is evident that the trend is toward elimination of such schools.

A second definition of what rural education is not--it is not a huge and cumbersome corporate enterprise inflexible to change. Rather, because they are comprised typically of small administrative units, immediately responsible to the wishes of the community they serve and subject to functional channels of communication, change in educational focus can literally be "brought about overnight." Consider, for illustration, the logistical problems of training the instructional staff of Washington, D.C. (enrollment 145,951--located in 186 schools) public schools for adoption and implementation of "Modern Math." Contrast this with providing the same training for the staff of Krum, Texas (205 students in grades 1-12 housed in one building).

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[1] Data adapted from Statistics of State School Systems, 1963-64, Bulletin No. OE-20020-64; Walter H. Gaumnitz, Small Schools are Growing Larger, Bulletin OE-36001-59, and Kenneth A. Simon and W. Vance Grant, Digest of Educational Statistics, 1968 Edition, Bulletin OE-10024-68. All available from: U. S. Government Printing Office, Washington, D. C.

If flexibility is really one of the advantages the small school has over its urban counterpart, then why has there been so little change taking place? Ralph Bohrson comments on this:

> A sample of the schedules of small high schools a few years ago revealed little deviation from the classical checkerboard. Standard-length periods, carefully organized, positioned and labeled, often fit the psychological and administrative needs of the teachers and the administrators.
>
> Further, I would here challenge anyone who has worked in a small school to show me how teachers can be of uniformly low quality, and administration a good one, and have the condition of low quality persist.[1]

Bohrson then seems to be "telling it like it is." The responsibility for utilizing the unique advantages of the small school lies with the administrative leadership. Discussion with many persons knowledgeable of the small school during the field portion of this study has repeatedly supported this conclusion.

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[1] Ralph Bohrson, "The Small High School--Its Strengths and Limitations," National Association of Secondary School Principals Bulletin 47:106-118 (April 1963).

A term that does require definition here is Shared Service. For the purposes of this report, a shared service will refer to an activity in which an educational function is provided for youth through the combined efforts of two, or more, local school districts. As mentioned earlier, shared service is most appropriately described as an "umbrella" term, for the variety of services provided through cooperative effort defies a single description. Roy G. Brubacher, Consultant to Boards of Cooperative Services from the Colorado Department of Education summarized the all-encompassing term with the statement "the number and variety of services which can be shared is limited only by the imagination of the personnel involved."[1]

In providing a definition of shared service, it becomes necessary to distinguish from that activity generally referred to as "shared time." Several persons, when confronted with the term "shared service," began discussing the practice whereby nonpublic (private/parochial) schools send their students to a nearby public school for instruction in one or more technical subjects--or conversely, where public schools release their students for a period of time each week to receive religious instruction. While this activity could be regarded as cooperation between public and nonpublic schools, it is not one of the shared services to be described by this report, nor does it fall within the scope of the definition we wish to apply here to shared service.

---

[1] Roy G. Brubacher in Denver, Colorado, November 1968.

Extent of The Problem

> Rural youth, like all other youth, need quality educational programs (1) to meet their full human potential in a rapidly changing world and (2) to fulfill their responsibility in a democratic society.
>
> Like many of their urban counterparts, many of our rural youth are being denied the opportunity for an education that makes it possible for them to learn at their own rate and in their own way.[1]

Thus spoke Nolan Estes before the National Outlook Conference On Rural Youth held in Washington, D. C., October 1967. Utilizing the criterion of course offerings available to students as a measure of educational opportunity, data compiled by the U. S. Office of Education for the school year 1960-61 supports the contention made by Estes.

Table II provides a listing of those courses generally available in secondary schools having an enrollment of more than 500 pupils contrasted with those schools under 200 enrollment.

Table II PERCENT OF SECONDARY SCHOOLS OFFERING[2] SELECTED COURSES BY ENROLLMENT SIZE

Course Title	Under 200 pupils N = 9453 schools	Over 500 pupils N = 7663 schools
LANGUAGE ARTS:		
Remedial Reading	4.8 %	28.5 %
Developmental Reading	2.4 -	18.5 -
World Literature	1.4 -	5.8 -

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[1] Nolan Estes, Meeting The Impact of Socio-Economic Change Through School Program Innovations In Rural Areas, A Speech Presented at National Outlook Conference On Rural Youth, Washington, D. C., October 23-26, 1967, (Washington, D. C.: The Conference, 1967), p. 1.

[2] Data adapted from Grace S. Wright, Subject Offerings and Enrollments In Public Secondary Schools. Washington, D. C.: Bureau of Educational Research and Development, U. S. Office of Education, 1965.

(Continued)
Table II

PERCENT OF SECONDARY SCHOOLS OFFERING SELECTED COURSES BY ENROLLMENT SIZE

Course Title	Under 200 pupils	Over 500 pupils
Speech/Public Speaking	17.6 %	51.8 %
Debate	.07 -	1.5 -
Dramatics	2.4 -	26.3 -
Creative Writing	.62 -	8.4 -
Remedial English	.33 -	4.48 -
SOCIAL SCIENCES:		
Ancient History	1.48 %	7.46 %
Modern History	.72 -	7.48 -
Problems of Democracy	12.8 -	24.95 -
Economics	11.0 -	25.46 -
Consumer Education	1.7 -	4.3 -
International Relations	.3 -	1.7 -
MATHEMATICS:		
Geometry, Plane	55.4 %	69.4 %
Geometry, Solid	11.5 -	42.46 -
Trigonometry	21.07 -	55.1 -
Advanced Mathematics	.9 -	12.8 -
SCIENCE:		
Biology, 1st Year	67.35 %	70.79 %
Advanced Biology	1.4 -	14.27 -
Chemistry, 1st Year	45. -	64.7 -
Advanced Chemistry	.9 -	8.8 -
Physics, 1st Year	30.7 -	62.7 -
Advanced Physics	15.8 -	36.3 -
Research Seminar	.37 -	1.4 -
FOREIGN LANGUAGE:		
French III	1.2 %	24.7 %
German III	(none) .0 -	8.3 -
Latin III	.6 -	22.1 -
Spanish III	1.1 -	24.5 -
FINE ARTS:		
Art Appreciation	1.5 %	14.38 %
Commercial Art	.16 -	10.57 -
Chorus	34.96 -	65.44 -
Instrumental Ensembles	6.7 -	14.6 -
Band	41.9 -	85.88
VOCATIONAL:		
General Shop	24.2 %	42.16 %
Drafting/Mechanical Dr.	14.6 -	61.86 -
Metalworking	3.7 -	39.57 -
Electricity/Electronics	1.6 -	19.2 -
Auto Mechanics	.4 -	7.98 -
Photography	.4 -	4.86 -

(Continued) Table II PERCENT OF SECONDARY SCHOOLS OFFERING[1] SELECTED COURSES BY ENROLLMENT SIZE

Course Title	Under 200 Pupils	Over 500 Pupils
HOME ECONOMICS:		
Home Economics, 1st Year	62.4 %	73.4 %
Home Economics, 3rd Year	42.3 -	42.0 -
Home Economics for Boys	1.2 -	2.6 -
Family Living	6.9 -	19.6 -
COMMERCIAL:		
General Business	21.53 %	48.85 %
Shorthand I	41.4 -	63.3 -
Office Practice	19.1 -	42.39 -
Retailing	(none) .0 -	7.0 -
Salesmanship	1.0 -	11.5 -
Distributive Education	.15 -	14.09 -

[1] Data adapted from Grace S. Wright, Subject Offerings and Enrollments In Public Secondary Schools. Washington, D. C.: Bureau of Educational Research and Development, U. S. Office of Education, 1965

Caution should be used in examining Table II. The courses listed are only a selected group of those listed by Wright. For examination of the complete list the reader should consult the source.

The courses listed were selected to illustrate two important points: (1) that a variety of courses, wider than those now generally available in the small high school, can be offered in rural schools, and (2) that the widest discrepancy of course offerings appears when one examines those offerings often described as enrichment courses. It will be noticed that in schools of more than 500 pupils, the availability of enrichment courses exceeds that of small secondary schools by a ratio of five to one or more. This should not be interpreted as an indictment of the smaller secondary school, but rather used to point up the potential of shared service offerings.

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[1] Data adapted from Grace S. Wright, Subject Offerings and Enrollments in Public Secondary Schools. Washington, D. C.: Bureau of Educational Research and Development, U. S. Office of Education, 1965.

A second measure of educational opportunity usually applied is the provision of programs for the exceptional child. Table III gives an indication of the extent to which exceptional children exist in the American population. It seems reasonable to assume the same percentages would exist in rural America as readily as in urban/suburban America.

Table III

ESTIMATED NUMBER AND PERCENT OF[1]
EXCEPTIONAL CHILDREN
FOUND IN THE SCHOOL POPULATION

Number per 1000 Pupils	Type of Exception	Percent
2	Blind and partially sighted	0.2 %
15	Deaf	1.5 -
35	Hard of hearing	3.5 -
10	Crippled	1.0 -
15	Delicate	1.5 -
16	Speech defective	1.6 -
20	Mentally retarded	2.0 -
2	Epileptic	0.2 -
25	Socially unadjusted--behavior	2.5 -
20	Mentally gifted	2.0 -
160	Are Exceptional	16.0 %

The provision of programs for the exceptional child has undoubtedly received the greatest emphasis among those shared service projects identified by this study. Several factors seem to motivate these endeavors: (1) the programs are usually dependent on a larger population than that contained in one district, (2) the recognition of need for these programs for even the limited number within a district, (3) the emotional appeal of providing for the exception, along with (4) the knowledge that exceptional children can be aided.

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[1] Robert M. Isenberg, *The Community School and The Intermediate Unit: Yearbook 1954*. Washington, D. C.: Department of Rural Education, National Education Association, 1954, p. 11.

Another measure of educational opportunity is included in the often used phrase "access to education." If the number who complete their formal education is an indication, then those obtaining their education in rural schools have had less access than those from metropolitan areas. Table IV provides a statistical view of this feature.

Table IV YEARS OF SCHOOL COMPLETED: 1967
BY METROPOLITAN AND NONMETROPOLITAN RESIDENCE[1]
Persons 14 years old and over as of March 1967

	Metropolitan	Nonmetropolitan
ELEMENTARY SCHOOL		
Less than 5 years	3.8 %	6.5 %
5 to 7 years	8.2 -	12.3 -
8 years	13.3 -	16.4 -
HIGH SCHOOL		
1 to 3 years	22.4 -	22.6 -
4 years	31.6 -	27.7 -
COLLEGE		
1 to 3 years	11.2 -	8.4 -
4 years or more	9.5 -	6.2 -
MEDIAN SCHOOL YEARS COMPLETED	12.1 yrs.	11.0 yrs.

The apparent imbalance of formal education in the rural population can undoubtedly be explained by the movement to the cities of those who found little occupational opportunity in rural areas. D. E. Lindstrom note

> Nine out of ten farm and non-farm rural youth graduating from high school must find jobs outside of farming. Farm technology has advanced phenomenally, and will continue to do so. This means that fewer jobs will be open in farming for rural youth; from 1955 to 1965 about 12 thousand fewer farmers and farm laborers were needed in Illinois alone--a decrease of almost 15 percent. In the country as a whole the decrease was higher (about 17 percent). Workers coming from rural to urban areas have to take lower prestige and poorer paying

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[1] Data adapted from U. S. Bureau of the Census, Statistical Abstract of the United States: 1968 (89th edition). Washington, D. C., 1968, Table 158, p. 111.

jobs because they are less well educated than their urban cousins.[1]

A disproportionate number of socially and culturally disadvantaged youth reside in the rural areas of America. Children of migratory workers--those moving from one field harvest to another; children of low-income agricultural workers; Indian youth educated on reservations; children of Spanish speaking (in the Southwest) and French speaking (in the Northeast) Americans, those from Appalachia; along with those from Alaska provide a population base that can accurately be described as culturally and socially disadvantaged. This fact becomes even more important to the nation when acknowledgement is made that "federal census figures show that more than ten million (approximately 5 percent of our population) poor whites and Negroes moved from rural areas into the cities in the 1950's, a mass shift that has continued unabated in the 1960's."[2]

Views Set Forth Relative to Shared Service Activity

Among the earlier discussions of shared activity (provided here to illustrate the recency of this movement) was that written in 1934 by J. H. Moyer discussing the use of traveling schools in Canada; correspondence education in Australia; traveling teachers in Cuba; and part-time music, speech, art and dramatics teachers in Kansas.

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[1] D. E. Lindstrom, "Educational Needs of Rural Youth," Journal of Cooperative Extension (Spring 1965):33-41.

[2] Fred J. Cook, "The Outrage of Our Streets," Saturday Review of Literature 52:29-31 (January 18, 1969).

> Attention should be called to the fact that many of the innovations presented...are still largely in an experimental stage. It seems safe to conclude, however, that these innovations are making a definite contribution to the economical provision of more adequate educational programs.[1]

Howard A. Dawson related shared service activity to agricultural cooperatives:

> Farm people who are members of cooperatives have become fully aware that, when their own unit of production is small, they can compete with big organizations only by joining forces and cooperating. This well understood need is identical to that which smaller school units have for providing an educational program of the scope and quality considered essential in smaller communities and rural areas....The theory of cooperative educational services, however sound, is little understood (by rural educational leaders).[2]

Edmund A. Ford evaluated shared services and enumerated a few of the more beneficial services to be shared:

> There are many school districts which could profit immediately from the shared-service plan. One ingredient, however, is prerequisite to success. That ingredient is cooperation.... The most obvious manner in which school districts can utilize shared services is by sharing teachers. ...A variation in the program of shared services is for one school to transport a group of students to another school for a certain course.... A type...gaining in popularity (places) emphasis upon providing gifted or highly talented students with an organized learning experience not normally available in the high school.[3]

Speaking of the trend in rural school district reorganization, Walter H. Gaumnitz noted:

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[1] Moyer, loc. cit., p. 34.

[2] Howard A. Dawson, Rural Education--A Forward Look: Yearbook 1955. Washington, D. C.: National Education Association, Department of Rural Education, 1955, p. 60.

[3] Edmund A. Ford, Rural Renaissance: Revitalizing Small High Schools. Washington, D. C.: Bulletin 1961, No. 11, U. S. Office of Education, 1961, p. 47.

> Many of the purposes of the "consolidated school," popularly acclaimed during the second and third decades of this century, are now being achieved in various ways. Many local, small school districts are contracting for the education of their children with existing nearby school districts.... It is clear from these developments that in many cases... the expansions of the educational services provided rural youth are going forward in many ways other than those promised earlier by "school consolidation."[1]

Another area of sharing services--that of cooperative purchasing--is discussed by Stephen J. Knezevich and John Guy Fowlkes.

> There is evidence that cooperative purchasing is of considerable value. In cooperative purchasing agreements, several school districts get together to submit a single large purchase rather than several small purchases of the same item. The objective is savings that result from quantity buying.... The success (of several plans described) clearly indicates a possible trend in cooperative purchasing through informal organizations or through intermediate units of school administration.[2]

Floyd Falany was describing the development of "regional shared services" projects in Georgia when he stated:

> Today over one hundred thousand boys and girls in this state (Georgia) are receiving special services through the joint efforts of school systems in rural areas. It has become apparent that the nominal costs are far outweighed by the quality and quantity of services provided....This is a way to bring special services to rural boys and girls and still allow the local people to run their own schools.[3]

Explaining that his text is addressed to prospective teachers, and that the reader "can hope to increase his understanding of what American secondary education has been, now is, and could be," Mauritz Johnson, Jr., supplements the views expressed earlier.

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[1] Walter H. Gaumnitz and David T. Blose, The One-Teacher School--Its Midcentury Status. Washington, D. C.: Circular No. 318, U. S. Office of Education, 1950, p. 3.

[2] Stephen J. Knezevich and John Guy Fowlkes, Business Management of Local School Systems. New York: Harper Bros., 1960, p. 70.

[3] Floyd Falany, "Shared Services In Georgia," Georgia Education Journal. (February 1968):12-17.

> In areas where the population is sparse, it is often impracticable to create larger schools. Small schools can broaden their programs, however, by using such devices as educational television, programed instruction, correspondence courses, alternate-year offerings, and the sharing of teachers with the nearest school. Some states have created shared-services boards through which a number of participating systems can jointly employ teaching personnel and other specialists for part-time service in their schools.[1]

Perhaps the nearest statement found which seems to set forth a criticism of cooperative efforts comes from A. W. Sturges and Edward Krahmer:

> Title III (Elementary and Secondary Education Act, 1965) funds, in particular, have resulted in a rapid increase in small school projects so that now almost every one of the fifty states is operating some sort of program.
>
> A discouraging note has been that these new Title III Projects have begun by duplicating efforts, profitable and unprofitable, of the established projects. This is natural; the same isolation which spawned rural education and small schools projects also hinders dissemination of the results of these projects.[2]

The professional literature rarely speaks directly to shared services. However, an extensive list of writings focused on rural education along with techniques for improvement is provided in the first supplement to this report: A Bibliography of Rural Shared Services.

While local school districts have long engaged in the activity of cooperating to provide services they otherwise were unable to offer their pupils, it is believed that this is the first document to address itself exclusively to the topic.

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[1] Mauritz Johnson, Jr., American Secondary Schools. New York: Harcourt, Brace and World, Inc., 1965, p. 29.

[2] A. W. Sturges and Edward Krahmer, "What is New in Rural Education: NFIRE," The College of Education Record. Grand Forks, N. D.: The University of North Dakota, 52:130 (May-June 1967).

SUMMARY

Based on the premise that "every child should have available to him a comprehensive program that includes general education, special attention to the differentiated needs of the gifted, the average, and the slow learner; and programs appropriate in content and variety for both the college-bound and those desiring vocational training,"[1] several attempts have been made to devise means for providing these programs to rural youth. One of the more promising arrangements employed is that of "sharing services."

The fact that some rural districts are now providing a wide variety of programs to their youth can be interpreted as evidence that, given proper leadership, others can also provide needed services. That the need exists is undeniable. The migratory nature of the American population insists upon an equal educational opportunity for all youth--that some are not receiving an equal opportunity is evident.[2] That the education obtained by rural youth reflects strongly on the achievements of the greater society in which they live is also evident.

A review of the statements relative to shared services reveals only favorable comments on the potential benefits to be derived from such activity. Perhaps this can be accounted for by the tendency of individuals, both in and out of education, to refrain from recording their disappointments and failures. It is interesting to speculate, however, that shared services have consistently produced the results desired for them.

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[1] Falany, loc. cit.

[2] James S. Coleman, et al., Equality of Educational Opportunity. Washington, D. C.: U. S. Office of Education, National Center for Educational Statistics, 1966.

That shared services are not universally engaged in by rural districts can be explained, in part, by the failure of successful projects to widely disseminate information about their activities. One can reflect on the possibility that rural educators have less tendency to write of their accomplishments than their urban counterparts.

CHAPTER II

ADMINISTERING SHARED SERVICES

Organizational Patterns

The growth of shared services among rural public school districts has necessarily evoked change in the administrative structure of the state system of schools to accommodate this function. While it has not been the primary purpose of this study to explore the many arrangements provided for the implementation of additional services to the school, it is felt that brief descriptions of each would enable the reader to place subsequent discussions of the many services provided into proper perspective. This chapter will describe the more important organizational configurations through which services are shared among schools in rural America.

One position needs first to be recognized before administrative arrangements are discussed, and that is simply that the State has the ultimate responsibility for the operation of a system of schools within its boundaries. That the several states have been obliged to delegate this responsibility to local, or subordinate, governmental agencies does not negate the fact that each of these subordinate agencies operates at the discretion of the State's legislation.

Spontaneous Cooperatives

This term is applied in this study to that joining together of two or more districts to provide one or more services as a result of local recognition that the service(s) is needed, and that to attempt to provide the service as a single district would not be feasible. This type of cooperative has existed for many years, and in the judgement of this writer will continue to exist in the face of other arrangements that may be provided legally.

Perhaps the most common application of this type of cooperation has occurred in providing interscholastic activities for youth. A common occurrence is the meeting of administrators and/or coaching staffs from several schools to develop athletic leagues and make provision for the selection of champions. Often this spontaneous cooperation has led to the provision of jointly sponsored music festivals, speech contests, gifted student seminars, cooperative purchasing, and the like.

In at least one area, several small secondary schools, each having an enrollment too small to warrant a chapter of the National Association of Secondary School Principals' National Honor Society, have joined hands to provide a Tri-County Chapter of the Society.[1] Each school may then provide this activity for its students, whereas, if the school were to attempt this alone the entire activity would likely become meaningless because of the limited participation. In Klawock, Alaska, the districts of Klawock and Craig share educational facilities. High school students from Klawock attend in Craig, while kindergarten students from Craig attend school in Klawock. Transportation facilities from Craig are used by both schools, but directed through the Craig administration.

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[1] The Tri-County Chapter of the National Honor Society is organized among schools with fewer than 150 students in Lane, Benton, and Linn Counties of Oregon. Currently the "chair" is at Mohwak High School, Marcola, Oregon.

Additional services enumerated in later sections of this report are also characteristic of the spontaneous cooperative. It is sufficient to state here that this type of organization is the more meaningful in terms of personal committment by the administration and staff of the schools involved. The obvious reason is that they were the ones who saw the need for the service and were directly involved in planning, implementing, and conducting the service.

School Study Councils

A second administrative arrangement is that organization known most commonly as the "school study council." This organization usually operates through a neighboring institution of higher education. A common practice is for the institution of higher education to provide office space and an executive secretary for coordinative functions. Typically, several schools within a region subscribe to membership in the council. For this subscription they are then provided statistical information concerning the schools in the area; information related to finance, personnel, school building design, budget procedure, among others; and information related to recent research and developments in education. Inservice for staff, school board institutes, student seminars are features of the Catskill Area School Study Council at State University College, Oneonta, New York.

While a board of directors comprised of representatives of member schools can establish policies which indicate the functions of the school study council, the services most generally provided can be described as research in nature, informational and coordinative.[1]

Supplementary Education Centers

A third administrative arrangement has been encouraged with enactment of P. L. 89-10, better known as "The Elementary and Secondary Education Act of 1965." Under Title III of this legislation, Provision was made for "supporting supplementary educational centers and services to stimulate and assist in the provision of vitally needed educational services not available in sufficient quantity or quality...." Describing the role of the education center, Pride Newsletter states:

> They should be organizations that welcome fresh ideas, develop an experimental and innovative approach to all problems and encourage the trial and evaluation of new procedures. To perform this role they should utilize and build upon the experience of established area service agencies....
>
> ...their objective...should be to promote cooperation among all agencies affecting education, and undertake to accelerate the process of orderly change toward the goal of raising the quality of education available to every individual in our society.[2]

The variety of services thus far provided through these supplementary educational centers is impressive. In Stamford, New York, Frank Cyr and his staff have developed the amplified telephone and an educational television network, from request of the instruction staffs of the schools served. A system of exemplary instruction programs in Elementary Science has been developed in a seven-county area of East-Central Kansas. The social science offerings, a museum visitation program, and a home visitor program utilizing lay persons characterize the activities of the Dartmouth-Lake Sunapee Center at Hanover, New Hampshire. A center to maintain, store and circulate audiovisual equipment and materials throughout Southeast Alaska has been established at Juneau. Emphasis on early childhood education, and continuous-progress reading program describe the major thrusts at Watkinsville, Georgia. In Idaho Falls, Idaho, the Snake River Center provides consultants in reading, english, social studies, mathematics, science, guidance, graphic arts, and library techniques. "Developing an art program in a bi-state, four-county area" is the outgrowth of Project: Art Start, with headquarters in Hood River, Oregon. At Alamosa, Colorado, an "experience camp in outdoor living, nature study, and diagnostic camp providing psychological testing of students with learning problems" was originated as a summer school for school age youth at nearby Camp Bristol.[1]

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[1] Berlie J. Fallon, "The School Study Council Movement," Phi Delta Kappan 42:6 (March 1961).

[2] "The Role Of The Regional Educational Center," Pride Newsletter Vol. 1, No. 1 (December 1968), published at Catskill Area School Study Council offices, Oneonta, New York.

The variety of administrative arrangements under which Title III (ESEA) can be implemented is best described by Section 601(f), Title VI of P. L. 89-10 in its definition of a "local education agency:"

> The term "local education agency" means a public board of education or other public authority legally constituted within a State for either administrative control and direction of, or to perform a service function for, public elementary and secondary schools in a city, county, township, school district, or other political subdivision of a State, or such combination of school districts or counties as are recognized in a State as an administrative agency for its public elementary and secondary schools. Such term also includes any other public institution or agency having

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[1] A comprehensive listing of Title III (ESEA) projects is available from Superintendent of Documents, U. S. Government Printing Office. Order Pacesetters in Innovation (specify year: 1966-67-68), at $2.50 each.

> administrative control and direction of a public elementary or secondary school.[1]

As can be seen, then, not only did the Elementary and Secondary Education Act of 1965 encourage curricular expansion, but provided the incentive for local districts to cooperate in implementing new services.

Intermediate Units

A fourth administrative arrangement under which educational services are provided is that known as the intermediate unit. This structure has been described most appropriately as "the middle echelon of a state system of schools made up of a state education office, numerous local school districts, and less numerous intermediate school districts."[2] Perhaps best recognized in its historical role as the Office of the County Superintendent of Schools, this "second echelon" is rapidly changing its profile. Reorganization efforts in nearly all states, accompanied by popular descriptions of an "adequate size school district," have prompted many states to establish intermediate units transcending county political boundaries.

Robert Isenberg observed in 1954 that "three functional aspects of educational operation exist in every state--the state, the basic or community unit, and between them, an intermediate unit. The specific duties of the functional divisions vary from state to state."[1] Acknowledging that generalizations were most difficult, Isenberg went on:

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[1] Robert M. Isenberg, "The Multidistrict Local Education Agency," Journal On State School Systems Development 1:249 (Winter 1968).

[2] William J. Emerson,"Intermediate School Districts," Journal on State School Systems Development, 1:33-45 (Spring 1967).

> Beyond the fact that an intermediate type of organization exists in most states there are many differences among them. In some instances where the county is the intermediate unit, it is required or empowered to levy taxes. Some others have no such authority. In some states the intermediate officer is a field member of the staff of the state education department, while in others he is a county official. In some states there is a provision for a county board of education while others have no such provision. Some states require the highest type of administrative credentials for their intermediate officers, while in other states not even a teaching certificate is required.... Many of these differences exist within states as well as among them.[2]

The traditional view of the intermediate unit has held that this structure serves as a downward extension of the State Department of Public Instruction. Recent discussions on the role of this unit have pointed to a newer philosophical position--that the intermediate unit is a service agency of the local district. Contrast the following statements for illustration:

> the intermediate agency has commonly followed previously established county lines. As an arm of the state, the intermediate unit has discharged state responsibilities....[3]

> The intermediate unit should have responsibilities to both the constituent local school district and the State Department

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[1] Robert M. Isenberg, The Community School and The Intermediate Unit: Yearbook 1954, Washington, D. C.: Department of Rural Education, National Education Association, 1954, p. 27.

[2] Ibid., p. 39.

[3] The County Superintendent of Schools in the United States: Yearbook 1950, Washington, D. C.: Department of Rural Education, National Education Association, 1950, as cited in E. Robert Stephens, The Multi-County Regional Educational Service Agency in Iowa: Part I, Final Report, Cedar Rapids, Iowa: The University of Iowa, September 1967, p. 14.

> of Public Instruction. The basic orientation of the intermediate unit, however, should be to the local school districts, and its relationship to these districts should be that of helper rather than master.[1]

> ...the educational service unit board must plan for the provision of supplementary services with the cooperation of the local school district boards of education, thus preventing the service unit from imposing services upon the local district.[2]

The creation of the regional intermediate unit as opposed to the county superintendency concept has been the most active legislated administrative structure in recent years. In New York these units are known as *BOCES* (Boards of Cooperative Educational Services); in Colorado as *BOCS* (Boards of Cooperative Service); in Wisconsin as *CESA* (Cooperative Educational Service Agencies); in Iowa as *RESA* (Regional Educational Service Agencies); in Texas as *RESC* (Regional Educational Service Centers); and in Nebraska as *ESU* (Educational Service Units).

One of the better descriptions of the services provided by the regional intermediate unit is contained in a pamphlet prepared by the Colorado State Department of Education. Byron Hansford, Commissioner of Education, notes "any number of local school districts may cooperate to buy any service." In addition, "any particular (local district) board need buy only those services it desires,"[3] (under the legislation providing for the BOCS unit in Colorado). The following graphic interpretation is reproduced from the same pamphlet for illustration:[1]

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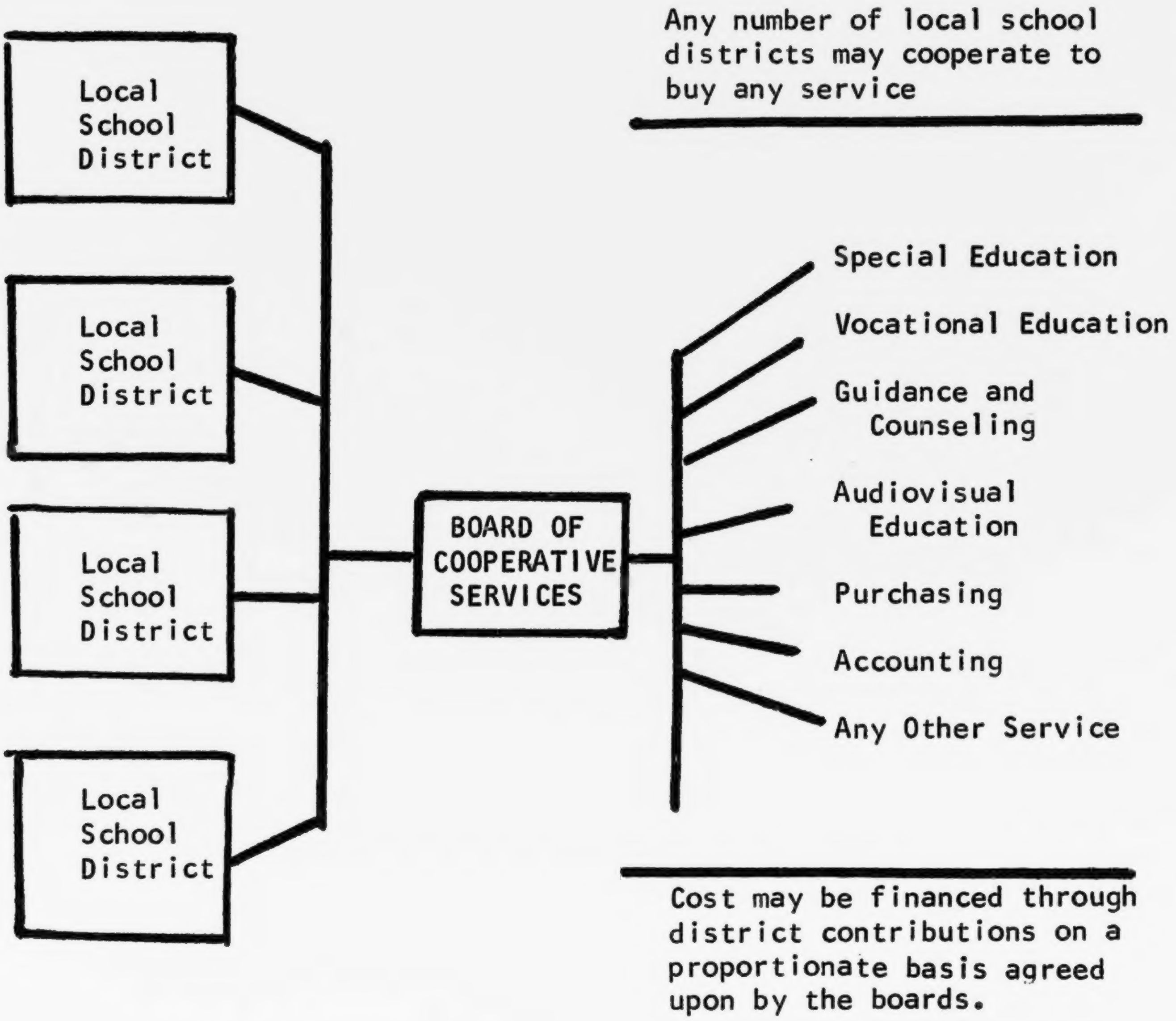
[1] Russell T. Gregg and George E. Watson, *The County Superintendency in Wisconsin*, Madison, Wisconsin: University of Wisconsin, 1957, p. 308.

[2] William R. Schroeder, "The Nebraska Service Unit--Its Provisions, Problems and Potential," from a paper presented to the Conference on School District Reorganization and the Intermediate Unit, Harrisburg, Penn., April 21-22, 1966.

[3] Byron W. Hansford, *Developing Cooperative Programs*, Denver, Colo.: Colorado Department of Education, 1966, p. 11.


Any number of local school districts may cooperate to buy any service
Local School District
Local School District
Local School District
Local School District
BOARD OF COOPERATIVE SERVICES
Special Education
Vocational Education
Guidance and Counseling
Audiovisual Education
Purchasing
Accounting
Any Other Service
Cost may be financed through district contributions on a proportionate basis agreed upon by the boards.

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[1] Hansford, Ibid.

The Single State Small School Improvement Projects

The Ford Foundation, Fund for the Advancement of Education, in 1957 provided the Colorado State Department of Education with the incentives necessary to organize the RMAP (Rocky Mountain Area Project). The project explored ways and means of overcoming "barriers of extreme distance, severe terrain, population sparsity, and such contrived obstacles as county lines and local tradition" in identifying alternative plans "for improving quality of learning opportunity for youngsters."[1] Under the leadership of Ralph Bohrson, who was then Executive Assistant to the Commissioner of the Colorado State Department of Education, the RMAP applied "small group techniques, multiple-class teaching, the use of complete film courses, extended teaching contracts, long-range planning, and correspondence courses" to the problems faced by those small schools regarded as necessarily existent.

> The various techniques or processes did not seem to depend upon the organizational plan (of the individual school). In other words, techniques which were planned to meet the objectives of the Project seemed to work effectively in each of the organizations. The dual or multiple class, while providing for an enriched curriculum, also provided for the use of techniques which promoted student participation, self-direction, and more individual assistance from the instructor.[2]

A second statewide project receiving impetus from the Fund for the Advancement of Education, Ford Foundation, originated in 1962 in the State of Oregon. The OSSIP (Oregon Small School Improvement Project) was but a part of the total endeavor. Included in the undertaking was an "attempt to improve instruction and accomplish (educational) reforms needed by the entire state." To accomplish this formidable task, Oregon's colleges and universities joined the State Department of Public Instruction and 91 school districts throughout the state in "making the newest ideas from experimental schools across the nation accessible to Oregon teachers."[1]

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[1] Byron W. Hansford, Rocky Mountain Area Project For Small High Schools: Report of the Second Annual Workshop, Denver, Color.: Colorado State Department of Education, Summer 1959, p. iii.

[2] Ibid., pp. 76-7.

Charles Haggerty, State Coordinator of the OSSIP describes the project:

> At the beginning, we concentrated on administrative details and mechanical ways of improving the schools, introducing such practices as nongraded classes, variable scheduling patterns, and teams of teachers. Now we're focusing more on the teachers and students--finding new ways to meet the needs of both.
>
> We've encouraged teachers to take a good look at what they're doing and how they're doing it. We've encouraged the schools to investigate ways to offer their students more subjects and exposure to more teachers through such devices as shared services with other districts, television, correspondence courses, and programmed materials. Independent study is being encouraged in the small school with each child becoming more responsible for shaping his own education.[2]

Under the leadership of the State Board of Education, the State of Texas established in 1959 an Advisory Committee on Small Schools. With Charles Bitters as director, the TSSP (Texas Small Schools Project) concentrated on the needs of "schools having fewer than 500 students in twelve grades." While initial incentive was provided by the Board of

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[1] The Oregon Program: Final Report 1962-1967 Submitted to the Ford Foundation, Salem, Oregon: State Department of Public Instruction, 1967, p. iv.

[2] Ibid., p. 17

Education, TSSP has operated chiefly on a voluntary participation basis with schools underwriting expenses on a fee basis. In 1960, eighteen schools were included and by 1968, one hundred twenty-six schools were involved.

Four goals have been the focus of the Texas Small Schools Project:

(1) To improve the quality of the instructional program.
(2) To develop new methods and techniques of teaching.
(3) To broaden course offerings.
(4) To increase the professional competencies of administrators and staff.

A feature unique to TSSP is the requirement that each school wishing to become a member is expected to complete the following activities:

(1) Conduct a community survey to ascertain the educational needs of children and to identify available resources.
(2) Initiate a complete self-evaluation of the school program.
(3) Evaluate the current guidance and testing program.
(4) Conduct a follow-up study on graduates and dropouts.[1]

For purposes of the Texas Small Schools Project, the State of Texas was divided into regions (thirteen at the end of 1968) to provide better articulation of the needs of the schools within a given region. These regions have regularly scheduled meetings that "serve as a regular part of the inservice training program." The regional meetings, along with the statewide summer workshops, have prompted the present director, Dale Carmichael, to remark: "It is in this area (increasing professional competencies) that we have been most successful. The opportunity to discuss ideas and learn of new developments appropriate to their local situation has developed a high esprit-de-corp among staff members of the small schools."[2]

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[1] "Texas Small Schools Project 1967," Texas Education Agency, Austin, Texas: March 1968.

[2] Dale Carmichael in Richardson, Texas, November, 1968.

A discussion of the entire variety of projects sponsored and encouraged as a result of the formation of TSSP would not be suitable at this point, but a quotation from Charles Bitters would seem in order:

> Since the Texas Small Schools Project was organized to help schools give their students better educational opportunities, it encourages activities that are uniquely appropriate to a small school; it discourages adaptation of the activities of a larger school unless they are particularly suitable. Certainly, several of the programs which have been the most successful in the small schools are not useful in larger schools. An effective Small Schools Project activity results from careful consideration and planning which meets a special need in an individual school.[1]

The Multiple-State Projects

A five-state project emerged in 1962 as a continuation of the Ford Foundation funded small school improvement project discussed earlier as the RMAP. Through an agreement among the State Departments of Education in Utah, New Mexico, Colorado, Nevada, and Arizona to "cooperate in finding solutions to common problems of small rural schools," the WSSSP (Western States Small Schools Project) was organized.

> Besides sharing results of their individual experimental efforts, and jointly publishing their findings, all states (involved in WSSSP) have investigated ways of providing additional opportunity in small schools for individualized instruction and continuous progress education.[2]

Some of the significant results of Western States Small School Project are described as:

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[1] Charles T. Bitters, "Quality and Variety in Texas Small Schools", National Association of Secondary School Principals Bulletin, 50:66 (Feb. 1966).

[2] Glen F. Ovard and J. Hugh Baird (eds.), A Comprehensive Regional Approach To Small School Development, Western States Small School Project, Salt Lake City, Utah: Utah State Department of Public Instruction, 1967, p. 7.

(1) The use of programmed materials and the multiple class arrangement have significantly expanded the course offering in small rural high schools.
(2) The combination of continuous progress education, nongraded curriculum, self-instructional materials, independent study opportunities and multi-phased curriculum is an effective approach to the individualization of instruction in small schools.
(3) The telephone is an effective tool for sharing teachers and for increasing the resources available to small schools.
(4) The large learning laboratory, team teaching, and the use of instructional materials have been blended into an instructional design that is particularly well suited to the small high school.
(5) By utilizing a team of change agents consisting of teachers and administrators in small schools, state department staff members, and consultants from university staffs promising changes in instructional practices in small rural schools can be effected and institutionalized.[1]

In addition to the broad objectives encompassing the five-state region, each state identifies different priorities, and, therefore, pursues its diverse interests.[2]

In Arizona, "continuous progress" organization in a school "having a predominantly Indian enrollment" has received emphasis; in Colorado, "pre-school programs" and "continuous progress"; in Nevada, the use of the "amplified telephone and other technology, along with a homework helper project"; in New Mexico, "improved preparation of culturally deprived and language training for Spanish-speaking Americans"; and in Utah, "instructional laboratories, educational television, cultural deprivation and research" have been the focal points.[3] Although some commonality exists, each state has been encouraged to develop those programs which best minister to their respective needs.

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[1] _Ibid_., p. 9.

[2] _Ibid_., p. 11.

[3] _Ibid_., p. 14.

With a focus "on improving the educational performance of disadvantaged pupils," the Southern Association of Colleges and Schools (one of six regional accrediting associations in the nation) has taken the lead to provide educational services to youth from Tennessee, North Carolina, South Carolina, Georgia, Alabama, Louisiana, Florida, Kentucky, Mississippi, and Texas. Supported by grants from the Ford Foundation Fund for Advancement of Education, the Danforth Foundation, the Mary Reynolds Babcock Foundation, the Noyes Foundation, Titles III and IV of the Higher Education Act, and the Community Action Division of the Office of Economic Opportunity, a total of $21,116,550 had been committed as of September 1, 1967.

A description of the Southern Association of Colleges and Schools' EIP (Educational Improvement Project) is provided by John Codwell, Associate Director, Atlanta, Georgia:

> The EIP may be considered a kind of "umbrella" project which includes at the present seven parts, all of which have the same objective--the improvement of education--but each of which uses a different vehicle to achieve this objective.
>
> (1) The Urban Center Program includes:
>   (a) pre-school education
>   (b) in-service for teachers
>   (c) communication skill development
>   (d) numerical skill development
>   (e) family involvement
>   (f) cultural enrichment
>   (g) community cooperation
>
> (2) Project Opportunity includes:
>   (a) identification of potentially high achievers in the seventh grade
>   (b) special education programs through secondary school
>   (c) counseling and guidance
>   (d) scholarship awards to qualified students
>
> (3) College Preparatory Center Program includes:
>   (a) high school graduates who need additional preparation for college
>   (b) provision of textbooks, materials, and meals for these pupils

(4) The Rural Center Program includes:
    (a) identification and establishment of rural education centers in each of the nine states in cooperation with the respective State Departments of Education
    (b) teacher education
    (c) communication skills development
    (d) family involvement
    (e) cultural enrichment
    (f) school-home-community agent service
    (g) non-professional staff aide service
(5) The Reading Institute Program involves:
    (a) summer workshops to improve performance of elementary and secondary teachers
    (b) a follow-up procedure with those teachers who attended the summer workshops
(6) The Paperback Book Project involves:
    (a) ninety-nine colleges and universities with predominantly Negro enrollment, plus all high schools in Project Opportunity
    (b) providing $1.00 for one book for each student enrolled.
(7) The Tool Technology Project is a new approach to:
    (a) an understanding of tools and their place in the American culture
    (b) the implementation of this tool technology concept as a teaching arrangement at the pre-school, elementary and secondary levels
    (c) cooperation between educators and tool technicians.[1]

Obviously not limited to working with rural youth, the Educational Improvement Project has, nonetheless, allocated a substantial portion of its efforts and finances to the problems of education in rural areas.

Another multistate organization created under Title V (ESEA) has resulted in changes affecting rural schools in that region. The Great Plains School District Organization Project was funded to (1) improve the State Departments of Education, and (2) to assist in resolving some of the major problems of State Departments. An outgrowth of this project was intensive investigation of the status of educational quality and quantity in the rural districts of the states of Iowa, Missouri, Nebraska, and South Dakota. Findings of the investigation have led to creation of regional intermediate units in Iowa and Nebraska with the expressed purpose of providing additional services and upgrading the instructional programs available in rural areas.[1]

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[1] John E. Codwell, "The Education Improvement Project of the Southern Association of Colleges and Schools--A Focus on Improving the Educational Performance of Disadvantaged Pupils," The Journal of Negro Education, 36:326-33 (Summer 1967)

Regional Educational Laboratories

In 1966 a national network of educational laboratories was created to "initiate change for the improvement of education within the region" of each laboratory. Having no "legal basis for intervention into local district practices through State Departments of Education, colleges or universities, local school systems, or any other constituted agencies,"[2] the laboratories "seek to introduce and make operational the best that is known in educational practice" through developing a greater degree of mix and cooperation among State Departments of Education, colleges and universities, and local school systems.

Two of the twenty educational laboratories have rural education as one of their chief component functions--The Appalachia Educational Laboratory, Charleston, West Virginia, under the direction of Benjamin Carmichael, and the Northwest Regional Educational Laboratory, Portland, Oregon, under the direction of Lawrence Fish.

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[1] Ralph D. Purdy, Guidelines For School District Organization: A Project Report, The Great Plains School District Organization Project, Lincoln, Nebraska: The State Department of Education, July 1969, Chapter II.

[2] Benjamin E. Carmichael, "Program Prospectus: Appalachia Educational Laboratory", Charleston, West Virginia: Appalachia Educational Laboratory, July 1967, p. 1.

Serving West Virginia and those parts of Pennsylvania, Ohio, Kentucky, Tennessee, and Virginia classed Appalachian, the AEL has encouraged the development of a network of Educational Cooperatives.

> The Cooperatives will permit school districts to pool resources and--without losing their basic autonomy--to draw upon the leadership and technical capabilities of state departments of education and institutions of higher learning. Media (i.e., television, radio, telecture, and related technology) and mobile facilities will link the schools together in a single educational environment.[1]

In addition to its work in developing Cooperatives, headlines from the 1968 Annual Report give an indication of the efforts of the Appalachia Educational Laboratory:

> "Guidance Program Will Allow Student To Explore World of Work"
>
> "Modern Communications Link Brings Quality Education to Small Schools"
>
> "Home-Oriented Preschool Education Will Reach 3-5-Year-Olds In Isolated Areas of Appalachia"
>
> "Teacher Training Has Two Goals"[2]

Serving Alaska, Montana, Washington, Idaho, and Oregon, the NWREL has developed three major activities: Program 100--Developing Instructional Leadership to Improve Teacher Competencies, Program 200--Improving Education For Culturally Different Children, and Program 400--Improving Instruction in Small Schools. A statement taken from the 1967 Annual Report gives an indication of the Program 400 activities and concerns:

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[1] Annual Report: Appalachia Educational Laboratory, Inc. 1968, Charleston, West Virginia: Appalachia Educational Laboratory, 1968.

[2] Ibid.

Youth enrolled in necessarily isolated schools have urgent need for wider ranges of instruction made possible by the use of modern educational technology. Consequently, activities must be aimed at enabling personnel in isolated schools to utilize modern instructional materials and processes to improve education for rural youth.

The capabilities of business, industrial, cultural and educational agencies are being focused on means to provide educational opportunities which will enlarge the aspirations and abilities of youth in the region's isolated areas.

Educational and occupational alternatives for youth in isolated small schools are being expanded through:

Development of multi-media self-instructional systems to broaden and enrich curriculum
Production of computer assisted instruction sequences which make it possible for each student to learn at his own speed
Design of counseling and guidance packages to help students make informed educational and occupational decisions.[1]

A National Federation

Twenty-five interested educators met in Salt Lake City, Utah, on April 28, 1967, to bridge "the broad gap between the average rural school and the average urban school educational programs." An outgrowth of this meeting was the formation of NFIRE--The National Federation For The Improvement of Rural Education. The objectives of NFIRE are twofold: (1) to provide an ongoing effort to reach the goal of comparable education f rural youth, and (2) to coordinate efforts in rural education improvement.[2]

Recognizing (a) surge in rural education efforts, the potential of new technology and the fruitless duplication of rather commonplace activities--duplication of efforts and the

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[1] Progress and Potentials: Annual Report to Members, Portland, Oregon: Northwest Regional Educational Laboratory, November 1967.

[2] A. W. Sturges and Edward Krahmer, "What Is New In Rural Education: NFIRE", College of Education Record, Grand Forks, N. D.: University of North Dakota 52:129-46 (May-June 1967)

> consequent waste of resources...NFIRE was founded to coordinate efforts in rural education improvement so that better use will be made of what resources are available.[1]

SUMMARY

In spite of the many organizational patterns provided to offer additional services to rural youth, there appears to be ample evidence that all youth in rural areas are still not benefiting from the many recent advances of education. The crucial problem in developing a suitable cooperative arrangement appears to be the design of that particular organizational pattern which will provide peculiarly for the needs of the youth in that particular region.

Several writers and studies have developed criteria for an adequate school district. Among the criteria the following are usually included:

(1) Minimum student population
(2) Area and recommended travel distance
(3) Financial base
(4) Social and economic unity
(5) Topography
(6) Roads and travel routes
(7) Climate
(8) Scope (i.e., K-12, 1-8, 9-12, K-14, etc.)

Student population adequate to support an administrative unit has received the major portion of attention.

The following listing of criteria for adequate administrative units and recommended pupil enrollments are those generally applied in reorganizational efforts. With the recognition that some regions simply cannot reorganize into adequate districts because of distance and population, along with the recognition that a hard core of districts will not consolidate, the organizational patterns discussed in this chapter are alternative solutions to reorganization as a means of providing equality of educational opportunity to the youth of rural America. Table V illustrates pupil population recommendations in selected states.

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[1] *Ibid*.

Table V RECOMMENDED MINIMUM PUPIL POPULATION FOR AN ADEQUATE ADMINISTRATIVE UNIT

State	Type	Scope	Minimum
Texas	Service Center	1-12	50,000
Wisconsin	Service Agency	K-12	25,000
Nebraska	Service Unit	K-12	10,000 (as guide)
Washington	Intermediate Dist.	K-12	20,000
Delaware	Local District	1-12	1,900
Michigan	Intermediate Dist.	K-12	5,000
Georgia	School System	K-12	10,000
Vermont	School District	K-12	6,000
Ohio	Local District	K-12	2,500
	Service Unit	K-12	10,000
Indiana	Local District	K-12	1,000
Pennsylvania	Local District	1-12	4,000
Oregon	Intermediate Dist.	1-12	4,000
Colorado	Service Unit	K-12	8,000

The alternatives described invariably cling to the American concept that the schools belong to the people and persons residing in a district know what they desire educationally for their children. The alternatives described also provide the opportunity for pupils within the local district to have access to the "knowledge explosion."

The phenomenal growth and establishment of Regional Service Agencies can only be attributed to the availability of funds through Title III-ESEA. Acceptance of these funds seems to indicate that the need for the services provided has long existed, but the limited financial resources available in many of those areas now utilizing Title III funds prevented those same services from being made available earlier.

CHAPTER III

SERVICES FOCUSED ON THE NEEDS OF PUPILS

Introduction

Specialized services which have been provided on a cooperative basis to serve pupils directly can be classified in five broad categories.

(1) Attendance
  (a) Pupil Personnel Director
  (b) Migrant Children
  (c) Dropout Problems
  (d) The "Home Visitor"

(2) Guidance and Counseling
  (a) Vocational Guidance--Career Days
  (b) Psychological and Psychiatric Services
  (c) Elementary School Guidance
  (d) Relation to Curriculum Development

(3) Health Services and Special Education
  (a) Handicapped Children
  (b) Speech and Hearing
  (c) Hot Lunch Programs
  (d) Driver Education

(4) Media, Materials and Libraries
  (a) Instructional Television
  (b) Amplified Telephone
  (c) Programed Instruction
  (d) Computer Assisted Instruction
  (e) Mobile Classrooms
  (f) Library Services

(5) Special Teachers
  (a) Remedial Teachers
  (b) Preschool Services
  (c) Fine Arts Programs
  (d) Vocational Education

At no point should the reader assume that the service discussed can be made available only on a shared basis, but one can assume that in locations where the service is not presently being provided, a collaboration with nearby district might well make the program feasible.

Attendance

Attendance at school is a basis in many states for distribution of that state's financial support program to districts. For this reason alone school districts are well advised to insure regular and proper attendance. But finance should not be the primary consideration. The education of the child should be the primary concern of those who desire to have the child in school.

Recognizing that lack of attendance can be traced to numerous factors (e.g., poor health, inadequate funds, lack of parental encouragement, improper grade placement, inappropriate educational programs) several attempts to overcome these factors have been initiated on a cooperative basis among local districts.

In Eastman, Georgia, the Heart of Georgia School System Shared Services Project has provided a Director of Pupil Personnel Services, who, among other accomplishments, points to evidence of a decrease in negative behavior--dropouts, underachievement, boredom, delinquency--as a result of her services. Working with six school systems, thirty-one schools, and approximately 800 teachers, in a consultant capacity, she noted further "the morale of the classroom teacher has been lifted knowing that someone is available to give needed help."

Working directly with parents and students in the home, her activity in attendance emphasizes an additional role that such a person can fulfill on behalf of the pupils. In addition to visiting the homes of the youth, counseling them, and urging improved attendance, this consultant has worked as liaison with community agencies--health department, welfare department, and Community Action Programs.

At Lock Haven, Pennsylvania, schools from the surrounding rural area have utilized the computer center at Lock Haven State College to record attendance and assist in pupil placement, scheduling, testing and grade reporting. This data processing service is only one of a number to emerge from a regional Title III (ESEA) project in Area J of Pennsylvania.[2]

The importance of school attendance is recognized at the Caldwell, Idaho, Educational Development Center for Exceptional Children.

> The needs (of migrant pupils) were assigned priority because evidence from enrollment records established the average migrant pupil enrollment to be 31.5 days per school term, making baseline data and educational gains difficult to establish.[3]

Facing a periodic influx of children whose parents were mainly Spanish-speaking of Mexican-American descent, and whose chief employment centered on field crop harvests, the Caldwell Center collected information describing the extent of the problem and aided in designing possible solutions.

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[1] James B. Hussey, Director, Shared Services Project, Eastman, Georgia.

[2] The Commonwealth of Pennsylvania is divided into 18 regions for the purpose of coordinating Title III (ESEA) projects within the state.

Robert C. Stewart, Idaho Educational Centers and Services for Exceptional Children. Caldwell, Idaho: The Center, Application for First Continuation Grant under P.L. 89-10, July 1, 1968.

With this information the center then served as a catalytic agent in causing the L.E.A.'s (local educational agencies) to employ bilingual teacher aides, implement programed materials suited to the needs of these migrant youth, and expedite the processing of migrant pupils' records. An extensive summary of the educational needs of migrant pupils was developed from which specific activities and appropriate objectives have evolved. Among these is a program to eliminate duplication of services and to develop cooperative use of resources.[1]

In an effort to alleviate cultural, emotional, and financial problems on the part of students who would otherwise be encountering such problems under the boarding school concept...or who would not even be attending school, the Bristol Bay, Alaska, Borough School District has provided experimental secondary schools under a project known as the Satellite School Program. Noting that some students in the remote areas of the Naknek River region had no plans to attend school, due to lack of finances, low family interests, and minimum amounts of personal motivation, the district has been providing secondary training to ten pupils (six girls--four boys; two are freshmen, four sophomores, and four are juniors), by employing a teacher aide to maintain continuity with a different teacher flown in on each day of the week (e.g., English teacher Monday; mathematics teacher Tuesday; history teacher Wednesday).

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[1] John Beitia, Project Director, Center For Exceptional Children, Caldwell, Idaho.

Although standardized testing of the pupils to establish behavioral change has not been completed, the summary statement provided by Dan G. Turner, Bristol Bay Borough Superintendent, Naknek, Alaska, is relevant. "Other than for improvements in presentation methods...we feel that there is little more that we can do unless other schools are added."[1]

Working with parents in the home through home visitor personnel, providing consultant help to classroom teachers in an effort to avoid excessive absenteeism, pupil accounting through use of data processing equipment, providing liaison with other agencies which deal with youth, gathering of data from which informed decisions can be made, assistance in identifying the more important problem areas, and even providing for a "satellite school" are but a few of the services related to attendance that can be accomplished through cooperative effort.

Still another important aspect of the attendance problem was studied by the Texas Small Schools Project, Austin, Texas. Examination of the dropout patterns in small schools during the school years 1960-61, 1961-62, and 1962-63 from 49 small schools revealed that of a total three-year potential of 30,984 students, 459 (1.5%) discontinued their formal education before graduation. Of this group 269 were male and 190 were female. Tables VI, VII and VIII provide information from which attendance personnel and guidance personnel can draw implications.

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[1] Dan G. Turner, Superintendent, Bristol Bay Borough School District, Naknek, Alaska.

Table VI GRADE LEVELS GIVEN FOR DROPOUTS[1]

Percentage of 269 males	Grade Level	Percentage of 190 females
4 %	6	3 %
6 -	7	6 -
10 -	8	4 -
17 -	9	16 -
32 -	10	23 -
14 -	11	27 -
13 -	12	17 -

Table VII AGES GIVEN MOST FREQUENTLY FOR DROPOUTS[2]

Percentage of 269 males	Age Level	Percentage of 190 females
3 %	14	7 %
13 -	15	13 -
36 -	16	30 -
21 -	17	31 -
14 -	18	10 -
6 -	19	2 -

Table VIII REASONS GIVEN BY ADMINISTRATORS FOR DROPOUTS[3]

Reason	Percent of 269 males	Percent of 190 females
Low Scholastic Ability	14 %	7 %
Retardation	10 -	4 -
Financial Need	8 -	3 -
Dissatisfaction with School	10 -	5 -
Parental Attitude	12 -	3 -
Marriage	7 -	61 -
Poor Personal Adjustment	6 -	4 -
Delinquency	7 -	2 -

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[1] Dale Carmichael, Director, Texas Small Schools Project, State Department of Education, Austin, Texas.

[2] _Ibid_.

[3] _Ibid_.

Guidance And Counseling

One of the most convincing arguments for adequate counseling and guidance services to be produced in recent years comes from the much discussed Coleman Report.

> A pupil attitude factor which appears to have a stronger relationship to achievement than do all the 'school' factors together is the extent to which an individual feels that he has some control over his destiny. (p. 23)
>
> Of all the variables measured in the survey, the attitudes of student interest in school, self-concept, and sense of environmental control show the strongest relation to achievement. (p. 319)[1]

Much of the difficulty in providing for counseling and guidance services originates within the educational structure. Some educationists assert that if the school offers educational opportunities it has fulfilled its obligation. They contend it is the students' and parents' responsibility to m use of those opportunities. Others suggest that the school has the duty to meet all the needs of youth. They consider emotional stability, good health, vocational achievement, and social adjustment as legitimate functions for the school.

Part of the difficulty in gaining wider acceptance and recognition of the need also stems from lack of a clear definition and an adequate measure of guidance services. Because the areas of guidance and counselin are closely related to pupil behavior, the vocabulary is often involved with many technical terms not easily understood by the classroom teacher nor the layman--this has frequently led to misunderstanding of the role of the counselor, and a resentment of the function by the teacher. Through the provision of guidance consultants, shared services projects have been able to diminish this misunderstanding and resentment, and assist the teacher in fulfilling his own responsibility of guiding students.

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[1] James S. Coleman, et al., Equality of Educational Opportunity. Washington, D.C.: U.S. Office of Education, National Center For Educational Statistics, 1966, pp. 23 & 319.

One of the most prevalent duties of a guidance counselor involves vocational guidance. The major purpose is to provide students with basic information and to develop understandings necessary for informed decisions concerning vocational choices and adjustments.

> Guidance precedes enrollment in vocational education. More than 80 percent of the secondary school students have access to guidance counselors. These counselors discuss occupational selection with the student and provide testing services for measuring his aptitudes and capacity for enrolling in an occupational training program. The counselors also assist students in the selection of a training curriculum in high school. Counselors help them evaluate their progress, and to obtain placement after completion of the vocational training program.
>
> The guidance service is also available to graduates after they become employed. Counselors frequently keep in touch with workers informing them of changes in occupations, opportunities for advancement, and the availability of additional programs.[1]

Several unique approaches have been developed to provide vocational guidance to youth from rural regions. The Wide Horizons for Rural Youth Project at Colville, Washington, "grew out of expressions by students, parents and teachers for better orientation of high school graduates to the multiplicity and variety of job and career opportunities outside the 11 school districts of three counties of Northeast Washington."[1]

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[1] "Progress of Public Education in The United States of America: 1967-1968," Report of the Thirty-first International Conference on Public Education, UNESCO and the International Bureau of Education, July 1-11, 1968, Geneva, p. 36.

Developed in two phases, the Wide Horizons project first grouped students according to individual interests and aptitudes. Next, the students were transported by groups to urban and/or industrial areas to observe firsthand the variety of jobs available in their field of general interest.

> After group and individual counseling, college-bound students were transported to the colleges of their choice for orientation. Project personnel believed that while lectures, reading material and films would be helpful as a preliminary introduction to the world of work, such material could not take the place of actual on-the-job observation in the environmental setting.
>
> Portable files were organized, one with college information, and another with information on vocations. These files are kept up-to-date and are carried from school to school.[2]

Based on "the ever increasing complexity of finding a place in the world of work," the New Mexico Small Schools Career Selection Agent Program--a component of the Western States Small Schools Project--was designed to:

> Provide two small rural schools with a vocational guidance program on an experimental basis. Since the schools selected were so isolated with respect to any large city which could provide some occupational and vocational opportunities for the students, it was necessary to provide field trips and speakers so that the experience could be understood.[3]

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[1] Ruby Dubois, County Superintendent of Schools, Colville, Washington.

[2] Ibid.

[3] William Cross, Department of Educational Psychology, New Mexico Stat University, Las Cruces, New Mexico.

Two counselors from New Mexico State University, Las Cruces, New Mexico, commuted to work with students in each of the two high schools one day each week. Students from Weed and Cloudcroft High Schools were provided onsite field trips to El Paso, Texas, industrial centers, university, technical and nursing schools in addition to visitations to Holloman Air Force Base. Career Days, College Days and visits to Sun Spot Observation supplemented the work of the two counselors. "The increasing number and high percentage of students seeking posthigh school study is pragmatic proof that the program has proved (sic) worthwhile."[1]

The counseling and guidance staff of the Upper Red River Valley Project at Grand Forks, North Dakota, concentrated its efforts in the areas of (1) vocational workshops for persons responsible for counseling in the schools, (2) Senior Days, (3) consultant services for teachers regarding problem youngsters, (4) test interpretation, and (5) elementary school guidance. The URRVP project serves an eight-county area in northeastern North Dakota encompassing sixty-three school districts and eight parochial schools.

> The vocational workshops involved vocational advisors, persons who do not have a counseling background but are responsible for vocational counseling from the many schools which do not have counselors. The area meetings included videotape examples of vocational counseling interviews, group or classroom guidance procedures, up-to-date information on college and financial aids, and group interaction.
>
> 'Senior Days' consisted of meetings with seniors and/or juniors for approximately two hours in a large group. During this time the counselor explained the methods of choosing a vocation, available accredited institutions and financial aids. Following the group meeting the counselor scheduled individual counseling sessions with those students who requested an individual interview.

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[1] William Cross, Department of Educational Psychology, New Mexico State University, Las Cruces, New Mexico.

> Area schools utilized the counseling consultant services of the center by referring students with educational, personal, and social problems for consultation and followup.
>
> The test interpretation services consisted of the interpretation of group test results to faculties in order that test scores may be utilized more effectively by teachers and students.
>
> The elementary guidance workshops dealt with such topics as: practical guidance procedures in the elementary classroom; perceptual training; mental health; using referral sources in helping students; and developmental vocational guidance in the elementary classroom.[1]

Closely related to the guidance function, as well as more recent recognition of its relation to attendance, is that area of special services labeled psychological services. This, too, is one of the important adjuncts of the Upper Red River Valley Project. Noting that the psychological staff concentrated its activities in four main areas, (1) retardation, (2) educational learning problems, (3) emotional problems, and (4) a combination of these, the URRVP gives some evidence of the need for such services in rural areas. Five hundred eighty-two student referrals were made during the school year 1967-68 with one hundred fifteen family case studies completed.[2]

Guidance services are provided elementary students in an isolated rural area by itinerant counselors in a project entitled "Guidance and Counseling, Psychological, and Other Ancillary Services for Small Elementary Schools" at Sumner, Nebraska. Children who are emotionally

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[1] Mary Holmen, Secretary, Upper Red River Valley Educational Service Center, Grand Forks, North Dakota.

[2] _Ibid_.

2

disturbed, mentally retarded or physically handicapped are identified and screened according to severity of need. Counselors, teachers and administrators refer identified pupils for services provided by a school psychologist or psychiatrist. The school psychologist then pursues each case in a manner appropriate to the problem. An inservice and preservice program to train elementary guidance counselors for program initiation was conducted in cooperation with a nearby university.[1]

Curriculum development is the expected outcome of an Elementary Guidance and Curriculum Coordination Project at Corinna, Maine. Guidance services, including group guidance, group testing, parent group meetings, individual counseling and parent conferences in the homes provide data regarding pupil achievement, home backgrounds, statistics on student progress, and the existing elementary school programs which can be used in developing a master plan for educational improvement.[2]

One objective of the Dartmouth-Lake Sunapee Center for Regional Innovation was to develop ways and means of providing urgently needed information to schools regarding children whose deviant behavior is a source of difficulty in the classroom. The "home visitors" component of that Center's operation has provided information to counselors and to school nurses from which more informed judgements could be made. These home visitors are nonprofessional housewives with a high school education--the fact that they can be trained to function effectively in this role is evidenced by their performance at Hanover, New Hampshire.[1]

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[1] Barton L. Kline, Director, Educational Service Unit #12, Sumner, Nebraska.

[2] Orrison Moody, Director of Guidance, Corinna, Maine.

At Walla Walla, Washington, The Four County Educational Service Center has recognized a need for an elementary guidance program. Based on responses to a community survey ("the evidence seems to indicate that citizens want a number of services for their children that are truly guidance services but they do not interpret these services as guidance and counseling."),[2] school administration determination of needs in their own districts, and a concurrent recognition of the need by the directors, a program was designed to train:

> elementary school counselors to help parents, teachers, administrators and community agencies in providing maximal opportunities to children for actualizing their social, emotional, physical, academic, and intellectual capacities; and to provide psychological, sociological and counseling services during the process of training counselors. Services, and training of teachers for services, would cover all children including the severely handicapped.
>
> Under the guidance of universities, a combination of apprentice-academic, extern-internships, experimental, didactic, and specialized-interdisciplinary form of education will be integrated into a unitary whole.[3]

The Jo Daviess County Educational Center of Elizabeth, Illinois, provides psychologist services to students in member districts by employing one full-time psychologist and one psychologist intern.

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[1] Frank R. Thoms III, Director, Dartmouth-Lake Sunapee Center for Regional Innovation, Hanover, New Hampshire.

[2] A. Dale Whitenack and Arnold Tjomsland, Four County Educational Service Center. Walla Walla, Washington, County Superintendent of Schools, 1967.

[3] A. D. Whitenack, Assistant County Superintendent, Walla Walla County, Walla Walla, Washington.

A unique feature of activities there consists of high school seniors, under the supervision of a counselor, providing tutorial help to elementary students with learning difficulties. A news release published in the Freeport (Illinois) Journal-Standard, January 25, 1968 notes:

> Until the (Joe Daviess County Center) program was initiated, service of qualified specialists, such as speech therapists, psychologists, counselors and reading specialists were difficult to obtain. In fact there has been no psychologist available in the county for some time. Because of the shortage of needed specialists, many problems were left unsolved, especially with education of exceptional children.
>
> Dorothy Mutimer, a psychologist, is presently conducting educable mentally handicapped children tests in the county. Since September, 50 to 60 referrals have been given tests by her. Some of these children are now attending classes in East Dubuque and Galena. The schools are equipped to help those who are educable and trainable. Without exception, the children are happier and will receive education and training impossible without the services of the center.[1]

A mobile team, composed of an educational coordinator, clinical psychologist, school social worker, remediation specialist and research coordinator provide identification, evaluation and treatment to referred students at the Harlem, Montana, Psychological Services and Educational Remediation Center. Therapy is provided for students with emotional and social disturbances which are judged to hinder learning. Remedial and special education programs for mentally retarded children are provided.[2]

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[1] Albert J. Tucker, Project Director, Jo Daviess County Educational Center, Elizabeth, Illinois.

[2] John D. Morris, Superintendent, Harlem Public Schools, Harlem, Montana.

Health Services

If access to educational opportunity is a deficiency in rural America, it is no more severe than the deficiency in access to health services. With approximately 30% of the American people living in areas classed as rural by the Bureau of the Budget, only 12% of the physicians, 18% of the nurses and 14% of the pharmacists are located in such areas.[1]

Table IX emphasizes the problem that exists in attempting to provide adequate health services in rural areas.

Table IX RATIO OF PERSONS IN HEALTH OCCUPATIONS[2] TO POPULATION, BY COUNTY GROUP, 1962

Health Personnel (per 100,000)	Greater Metropolitan	Lesser Metropolitan	Adjacent Metropolitan	Isolate Semi-rural	Isolate rural	U.S.
Dentist	71.0	52.0	38.7	40.6	27.4	54.1
Nurse	492.7	509.3	388.3	350.6	195.7	449.8
Pharmacist	81.2	65.2	51.3	56.0	45.3	66.7
Physicians						
M.D.	195.4	145.3	85.6	94.2	53.0	142.9
D.O.	9.9	7.7	5.9	6.2	6.1	7.9
Sanitarian	4.6	6.9	5.8	6.3	3.9	5.7
General hospital beds per 1000 population	4.0	3.9	3.2	4.1	2.0	3.8

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[1] "Regional Education Agencies," Appalachian Regional Commission, Washington, D.C., 1968.

[2] Maryland Y. Pennell and Kathryin I. Baker, "Location of Manpower in Eight Health Occupations," Health Manpower Source Book. Washington, D.C.: U.S. Department of Health, Education, and Welfare, 1965, Table D.

Perhaps rural youth are just healthier persons than their urban counterparts. If visits to physicians and dentists are indicators, they are at least a hardier group than urban youth. Table X illustrates:

Table X PHYSICIAN, 1966-67, AND DENTAL, 1963-64, VISITS[1] PER YEAR, BY AGE AND RESIDENCE

Age of Patient	Physician Visits Inside SMSA's	Physician Visits Outside SMSA's nonfarm	Physician Visits Outside SMSA's farm	Dental Visits Inside SMSA's	Dental Visits Outside SMSA's nonfarm	Dental Visits Outside SMSA's farm
0-4 years	6.1	5.4	3.7	0.4	0.3	NA
5-14 years	3.0	2.5	1.4	2.2	1.4	1.0
14-24 years	4.1	4.0	2.5	2.3	1.6	1.1

Health services as such do not seem to receive much attention in activities classed as shared services. A number of projects, classified with special service and instruction for exceptional children were identified by this study. No data is at hand to support the speculation that the lack of focus on the students' health needs by shared service projects results from complacency or a sense of security that government health agencies will take care of the emergencies. While it may be true that widespread epidemics of communicable diseases are frequently combated by such agencies, schools would seem to be well advised to have a school nurse available to take care of emergencies and accidents.

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[1] U. S. Bureau of the Census, Statistical Abstract of The United States: 1968. (89th edition), Table No. 87, Washington, D.C., 1968.

Several areas of the school activity could be aided by the employment of a school nurse. Testing of vision and hearing, assisting in health instruction classes, home visitations, aiding teachers in the identification of illnesses or defects, and assisting in planning a balanced menu for the school cafeteria are but a few.

> Analysis of the average high school program reveals that health services and health instruction are either omitted or largely neglected, whereas physical education is usually required by law or regulation.[1]

Also evident to this writer is the superficial nature of training in first aid, and identification of illnesses given prospective teachers by colleges and universities preparing teachers.

That health instruction is not ignored in the public schools is evidenced by the units on health and grooming presented in the intermediate grades. The impression received by this investigator, however, is that this unit is typically textbook oriented. Recently, Dental Instruction Kits have been made available to public schools through the Professional Services Division of Proctor and Gamble Company. These kits were designed to promote interest in personal dental care and oral hygiene.

By incorporating into this category services provided for the handicapped and exceptional children, recognizing that many of these serve the health needs of the students involved, illustrations of the attempts to provide health services through cooperation is described.

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[1] William M. Alexander and J. Galen Saylor, "Secondary Education: Basic Principles and Practices." New York: Rinehart and Co., 1950, p. 308.

Recognizing the need for a facility to provide special education and training for handicapped youngsters, The Big Horn Children's Center at Thermopolis, Wyoming, was established through the efforts of "all administrators in a five county area." Financed through local school district funds and tuition from parents, a boarding school for the educable handicapped was provided.[1]

One of the earlier shared service efforts to provide for the handicapped emerged at Compton, California, under the auspices of the Compton Aural Education Center. "Eight separate school districts work together and successfully share in the education of their handicapped children on a cost exchange basis, pooling their problems and their solutions to those problems." Following a 1947 survey by the Compton PTA, a center for the cerebral palsied children opened in September of that year. Sight saving classes for children with severe visual problems, and aural education for deaf and hard of hearing youngsters developed later.[2]

The concept of an "educational team" emerged from the Education Modulation Center at Olathe, Kansas. Members of the team consist of social workers, hearing conservationists, psychologists, physicians, neurologists, administrators and classroom teachers.

> The team approach is a different procedure in that we are using educational consultants for initial child contact. These individuals utilize educational testing

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[1] Norman O. Mikkelson, Superintendent, Hot Springs County High School, Thermopolis, Wyoming.

[2] Myra Jane Taylor, Principal, Theodore Roosevelt School, Compton, California.

> rather than psychological testing to find what methods and/or materials can be prescribed to educationally program the child, which is, of course, the practical service needed and wanted by the classroom teachers.
>
> The educational team is designed to allow educational specialists to deal with the childrens' problems and to act as educational managers for materials prescription and appropriate referrals. Initiation of referral to other team members is the educational specialists' and the classroom teacher's decision. Intensive teacher inservice for adoption of techniques and materials, plus a series of parent counseling sessions, solidifies the team approach.[1]

Over a three-year period there have been more than 400 children processed and evaluated by a team of qualified individuals which include psychologists, speech and language pathologists, social workers, educational consultants, pediatricians, psychiatrists, and neurologists at the Monadnock Children's Special Services Center in Keene, New Hampshire. A unique function provided is "a talking book program for dyslexic children." One of their stated objectives is:

> To make further referral as necessary to obtain specialized examinations or consultations beyond its own staff competence in order to complete a diagnostic understanding of children with the most obscure or complicated deficits.

The Children's Center has, among others, (1) purchased 75 specialized examinations outside the center, including audiometric, ophthalmological and otological examinations, (2) provided 222 psychological evaluations, (3) provided 24 neurological examinations and (4) 87 pediatric or medical examinations.[2]

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[1] Gary Adamson, Director, Education Modulation Center, Olathe, Kansas.

[2] Maurice Collins, Jr., Director, Monadnock Children's Special Services Center; and John W. Day, Superintendent, New Hampshire Supervisory Union 29, Keene, New Hampshire.

Two additional areas of school curriculum generally included with health services are (1) the school hot lunch program, and (2) driver education. With the exception of cooperative purchasing of school lunch supplies and provisions through CESA No. 5, Elmwood, Wisconsin, this study did not reveal any shared activity in the hot lunch program. This investigator is confident other shared service organizations also pool their lunch program needs for the purpose of quantity purchasing, but no others were identified. Neither were any instances of mobile hot-lunch vans being shared by adjacent districts identified, although provision of such might seem appropriate in some geographical areas.

The specialized nature of driver safety education would seem to make sharing of instructor and equipment a desirable shared activity. However, only four illustrations of this activity were identified; three in Wisconsin and a fourth in Tennessee.

Library Services and Materials

With the growing technology of education and the massive output of visual, audio, and programed materials--and the concurrent adoption of this equipment by local districts--the distinction between "service focused on the needs of pupils," and "services which help teachers meet the needs of pupils" (chapter IV) becomes exceedingly difficult to distinguish.

Accordingly, examples of projects that involve students directly and projects that provide training for teachers in the use and preparation of educational media, as well as central film libraries, will be reviewed in chapter IV under the heading Curricular Services.

Certainly one of the more talked about activities in education today is that function described as Educational Television. While others exist, three efforts to reach rural youth through this medium are of such quality that they need mention in this report. NEWIST (Northeastern Wisconsin In School Television) is a nonprofit cooperative offering an "economical way for public and private schools to help themselves to 7½ hours of high quality broadcast television instruction per week."

> NEWIST, operated through CESA No. 9 with headquarters at Green Bay, Wisconsin, was established in early 1967 through a series of meetings with interested school people to try to establish a regular ITV (Instructional Television) schedule to be aired on a commercial channel. A teacher's committee selected from membership schools selects the year's schedule. The lessons are gleaned from the best planned and produced series made in America today.[1]

In Umatilla County, Oregon, the Educational Media Center decided to expand their services to provide ITV to area schools. Unable to receive the State of Oregon educational television channel due to terrain and remoteness, arrangements were made to develop their own broadcast studio and provide programs to area school via cable. Extensive planning with teachers and administrators has led to five hours per day of programed instruction available to students in 22 schools of two counties in northeastern Oregon.

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[1] Charles H. Wileman, CESA Programs Administrator, State Department of Public Instruction, Madison, Wisconsin.

> A closed-circuit 2500 mHz television system has been installed with originating source input at the Pendleton Intermediate Education District and terminating at each school building in the area served. This system is intended to be a distribution system to redistribute state network available television programming, and to distribute prerecorded videotaped lessons from other school districts and videotape libraries.
>
> Teachers from the classrooms have viewed, used, and evaluated all of the programming prior to the scheduled showings. Teachers have also experienced the use of videotape recorders as an evaluation tool in the classroom for evaluating teaching techniques and student performance.[1]

The Supplementary Educational Center at Stamford, New York, has developed a system of "hilltop microwave translators" to provide instructional television to the youth of this rural area. Programs are selected by a committee of teachers from the schools served. The unique aspect of this project is the provision of this service to the general viewing public as well as to the classroom. In the words of Frank Cyr, Director, "You must involve the parents as well as the students if you intend to have the program suceed--by presenting the programs on cable TV, the public can see what their children are getting and the reaction has been overwhelmingly favorable."

Attention should be called to the one unique characteristic of each of these Instructional television projects. In each case the classroom teachers who are utilizing the medium are the persons called upon to select and evaluate the content of the programs.

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[1] Charles McCullogh, Project Director, Umatilla County Intermediate Education District, Pendleton, Oregon.

Visitations to these three projects revealed the major difficulty involved with using television in the classroom: too often the programs were offered at a time when other activities precluded their use. With the availability of videotape recorders, however, this problem is being resolved. Notwithstanding the question (yet to be resolved) of copyright privileges, several schools are now taping the lessons for viewing at a later and more convenient time.

A second difficulty arises in the utilization of ITV where secondary schools are concerned. With the usual practice of scheduling more than one class section of a given subject (e.g., U.S. History at 9:00 a.m., again at 11:00 a.m. and again at 1:30 p.m.) the logistics of presenting the same lesson over television for each of the classes become insurmountable. A solution to this difficulty has been found in flexible and/or modular scheduling, and again, through the practice of taping lessons for later viewing.

Another example of bringing services to pupils via media is a project at Mesquite, Nevada, known as "Art By Telephone." The project provides a practical solution to a problem faced by many schools.

> In this unique teaching-learning situation eleven high schools from Oregon, Idaho, Utah, and Nevada--the smallest with an enrollment of 26, and the largest 160--have been receiving instruction in art simultaneously from a central source with the aid of the amplified telephone, conference

> bridge attachment, and coordinated projectuals.
>
> Each of the participating schools, during the actual lesson, is linked to every other school (as well as to the teacher) by means of a regular conference call placed through the telephone company. Each school is equipped with an amplified telephone which enables all students to hear what the instructor is saying, and to respond as the need for such occurs. Each school also has a set of transparencies (identical for every school) which are used either in a 35mm projector or on an overhead projector. These components, when used in concert, enable the instructor to (1) address every pupil in a direct manner, (2) respond to questions raised by pupils, and (3) illustrate his remarks to all pupils at the same time.
>
> The telelecture, or lecture-discussion, is presented to the participating schools on a regular basis (in this case, weekly). As has been indicated, materials such as student assignments, transparencies, etc., have been mailed out in advance, pupils in each of the locations may commence work on the assignment immediately following the telelecture. In every case the participating schools have recorded the telelecture on audiotapes and thus enabling individual pupils to relisten to what had been said.
>
> Upon completion of a particular assignment, the pupil(s) mails it to the instructor, who then critiques it. The assignments, together with pertinent comments, are then returned to the several pupils.[1]

Unique in its approach to programing materials is the School For One Project in southeastern Washington State. Under the direction of Arnold Gallegos of Washington State University, Pullman, Washington, a compact, portable film viewer with accompanying audio device has been developed to provide lessons on a one-to-one basis in fields often unavailable in rural high schools. Field tested at Anatone, Washington, the equipment is now being used cooperatively in small schools throughout Washington,

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[1] David L. Jesser, and Michael J. Clarke, Art-By-Telephone. Carson City, Nevada: Department of Public Instruction, Western States Small Schools Project, 1965.

Oregon, Montana, and Idaho. Last year these self-instructional kits made it possible to add courses in welding, physical science, speech, drama, electronics and plastics to the small school curriculum. Still in the developmental stage are programs in shorthand, advanced mathematics, psychology, drafting, library science and arts and crafts.[1]

A program of "cooperative curriculum development" located in St. Elizabeth, Missouri, proposes to make broad library resources available to students, teachers and adults in a three-county region of mid-Missouri. The project is enhanced through a built-in series of measures to "make the teachers aware of the library resources available."[2]

The Vernon, Alabama, multipurpose center provided teaching and library materials to teachers and students via a mobile unit, while at the Dalles, Oregon, emphasis is given to improvement of libraries within the schools. Special library consultants assist the classroom teachers in ordering, classifying and identifying their reference needs. A mobile library is one component of the Bottineau, North Dakota, supplementary education center, which also provides library service for adults of the area.

The utilization of a telewriter communications system "making available to students noted authorities throughout the nation and world in the various fields of learning" is the focus of a project serving six school districts in Barry County, Missouri.[1]

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[1] Arnold Gallegos, Assistant Professor, Washington State University, Pullman, Washington.

[2] Kenneth A. Martinez, Director, Cooperative Curriculum and Library Services for Rural Schools Project, St. Elizabeth, Missouri.

Development of CAI (Computer Assisted Instruction) under project REACT (Relevant Educational Applications of Computer Technology) has resulted in programs for both vocational instruction and advanced mathematics through the use of remote teletype terminals connected by telephone line to a computer in Seattle, Washington. This project, under the auspices of the Northwest Regional Educational Laboratory at Portland, Oregon, has been field tested at Cascade, Idaho, and Anatone, Washington.[2]

With long bus rides required of a large number of students to attend school, "audiobuses" are being provided in a region of central Colorado.

> An audiotape library has grown to 450 tapes and is becoming a sizable supplementary education center for the use of all children and teachers. Materials are chosen by a committee representing the various school levels. Library holdings are acquired by purchase, by loan, and by local recording. 'We tape appropriate special events of school and community activities and place them on the bus for students who have not attended the program. In this way they have an opportunity to hear some of the activities that they would otherwise have missed.'
>
> An audiobus is a regular 73 passenger bus specially adapted to transport 56 pupils and accommodate electronic gear that includes a seven-channel audiotape deck and 56 headsets, each with its own volume and channel selector controls. The first three channels carry programs of special interest to children in the three school levels: channel 1 for youngsters in grades 1-4, channel 2 for grades 5-8, and channel 3 for grades 9-12. Another channel delivers AM radio. The others are reserved for independent study tapes requested by individual students.

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[1] Jimmie B. Dyer, Director Cooperative Telewriter Educational System Project, Purdy, Missouri.

[2] Clifford Winkler, Systems Analyst, Northwest Regional Educational Laboratory, Portland, Oregon.

> During school hours and other times when it is not in use transporting pupils, the bus becomes a "teaching aid on wheels." Teachers may reserve it for field trips and for classroom activities calling for audio assistance.[1]

Capitalizing on the mobility of our modern society, the Coteau Hills Resource Center at Ellendale, North Dakota, has provided courses in power mechanics and basic electronics by use of mobile units.

> Two 10 x 50 special purpose trailers (mobile home conversions) are located approximately 50 miles apart, each serving two communities. One unit is appropriately equipped for instruction in basic electronics. The other unit is for instruction in basic power mechanics. Both instructors are specialists in their fields, and certified.
>
> Students who take these courses are selected on an interest basis, and the classes are conducted in such a way that open labs, small and large group instruction, and independent study can take place.[2]

An attack on the reading problems in both elementary and secondary schools has received the attention of personnel involved with the PEE DEE Regional Supplementary Educational Center at Florence, South Carolina.

> There are three reading laboratories consisting of two teachers with specialized equipment and materials, such as videotape recorders and other audiovisual aids; and one reading clinic staffed with three reading teachers and a teacher's aide. In addition, we have one individualized instructional program in an elementary school. This program uses the Sullivan Associates programed reading materials, grades 1-6.[3]

The "yellow submarine" component of Project Mid-Tenn at Nashville, Tennessee, has brought the children's museum to youth in the rural areas by mobile units.

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[1] Milton Hoffman, "New Way of Busing Students," American Education 4:14-17, February 1968.

[2] Robert G. England, Director, Coteau Hills Resource Center, Ellendale, North Dakota.

[3] John W. Baucum, Director, PEE DEE Regional Supplementary Education Center, Florence, South Carolina.

> The Children's Museum, long a favorite learning place for Nashville children, is being taken to the rural areas of Mid-Tenn by means of a large tractor-trailer rig. Displays depict water and the region--prehistoric, current and future. This unit, with a staff of three (inservice teacher, driver-curator, and tour teacher) is temperature controlled for all weather, has sophisticated lighting and sound effects, and contains displays designed to provide the creative teacher and pupil with much food for thought.[1]

Special Teachers

The Inter-American Educational Center, RESC No. 20 of San Antonio, Texas, has found an area of special instruction not usually recognized as special for the predominantly Spanish speaking youth of the region. Concentrating on South America as an instructional unit, the Center has secured the services of a foreign curriculum specialist from the Federal University of Minas Gerais, Brazil, to deliver guest lectures at Alamo Heights and other high schools throughout Region 20.[2]

In North Dakota, sixteen schools in the region surrounding Williston have been provided with the services of teachers especially trained in dealing with the slow learner. Three mobil classrooms were designed with teachers' living quarters in one end, and a classroom at the other. These units travel from school to school, remaining as long as is deemed necessary, offering instruction in basic skills to youth who, for one reason or another have fallen behind in their work.[1]

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[1] Robert Neil, Project Director, Project Mid-Tenn, Nashville, Tennessee.

[2] Dwain M. Estes, Director, Inter-American Educational Center, San Antonio, Texas.

A speech therapist that works in five schools, and a band director that works in one secondary school and three elementary schools are among the services shared under Project Dilenowisco at Jonesville, Virginia.[2]

Through the encouragement of the Appalachian Educational Laboratory, Charleston, West Virginia, a program of preschool education has been developed to serve youth in a seven-county area. Designed to reach the three-to-five year old, the program makes cohesive use of television, a mobile facility and home visitations by teachers.

> The local television station will carry the televised lesson daily Monday through Friday. A mobile classroom will visit each community once a week bringing activities for the children. These group activities are then to be coordinated with the televised instruction and home visitation. To prepare the parents for the upcoming TV lessons and the mobile van, a trained preschool staff member calls at each home for a half hour each week.
>
> An appropriate curriculum, emphasizing language development and social-emotional development has been written by the University of West Virginia's College of Human Resources and Education.[3]

Another effort to provide instruction in special areas is the purpose of The Open Doors Project in the Puget Sound area of Washington State.

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[1] Dick Palmer, "Teachers Ride the Range," American Education 4:22-3 (September 1968)

[2] Benny Coxton, Coordinator, Project Dilenowisco, Jonesville, Viginia.

[3] Roy W. Alford, Program Coordinator, Early Childhood Education, Beckley, West Virginia.

> The Puget Sound Arts and Sciences Program has introduced hundreds of thousands of students to the excitement of Seattle Center's artistic and scientific ferment. The students experience not only the high quality of the Center's resident (performing) organizations but also the beauty and expansiveness of the Center itself. This direct experience is more eloquent than a dozen classroom lectures in communicating to the youngsters the values of the culture in which they are growing up.
>
> There are obvious cultural and educational values in having 3,000 students come to an elegant Opera House to see and hear a full-scale opera or symphony concert. A special performance of the National Ballet of Canada demonstrated the wonders of full-scale dance production to a student audience. A workshop in modern dance and ballet techniques has been accepted enthusiastically by physical education teachers in the area.
>
> Because of the Performing Arts Program, tens of thousands of students in the Puget Sound area are being given a happy opportunity that many of their parents never had: that is, to develop the theater-going habit at an early age, to learn from direct experience that live theater creates a special combination of fun and excitement and involvement which no other entertainment form can match.[1]

Although Operation Open Doors serves youth in the metropolitan Seattle area, youth from such communities as Dieringer, Enumclaw, Fife, Issaquah, Mukilteo and Skykomish are included.

Project Arise, Lancaster, New Hampshire, has as its objective the introduction of the arts and humanities to the children of the northern half of New Hampshire (an isolated area containing about half the geographic area of the state, but less than one-third the school population). Centralized workshops for students and teachers are conducted in separate pockets of the area. Project Arise arranges for engagements by major artists on a "tour" basis. In addition to elementary and secondary programs in the visual arts, music, dance and the humanities, a central arts library making available to schools in the area such items as films, slides, recordings, tapes, weaving looms, theatrical lighting equipment, etc. on the arts has been established.[1]

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[1] James A. Stewart, Director, Puget Sound Arts And Sciences Program, Seattle, Washington.

The instructional area that has benefited most from regional utilization and development is also the area with the longest tradition of federal financial assistance--namely, vocational education. Area vocational schools have been established in so many areas of the United States that to list them all would be a redundant effort of this study. Mention of a few notable efforts is warranted, however.

One of the foremost developments is that by the State of Kentucky. The establishment of area vocational schools throughout the entire state was completed in 1967, utilizing programs developed through fifty years of experience. Oklahoma, though not organized for vocational centers throughout the entire state, has established excellent guidelines for their installation. Personnel in Wisconsin and Texas have been diligently applying their thoughts to regional implementation of Title III, Area Vocational Education programs under the George-Barden Act., PL 79-586 to 1946, and the Vocational Education Act of 1963, PL 88-210.

SUMMARY

To summarize the entire range of services that are "focused on the needs of pupils" is a monumental task. That numerous services have been successfully implemented is obvious. That still others will originate must be equally obvious. As long as educators are given the freedom and encouragement to stretch their thinking, new ways of providing knowledge information, and foundations from which to build will continue to emerge. The growing interest of private industry in the technology of education must also be acknowledged. Many industrialists have recognized the profit potential of investing in educational hardware. As private enterprise continues to explore new instructional packaging methods, additional opportunity for sharing services among LEAs will develop.

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[1] Helen F. Evans, Director, Project Arise, Lancaster, New Hampshire.

For a more complete listing of services provided directly to youth, the reader is invited to refer to the second supplement to this report, Locations Where Shared Services Exist.

CHAPTER IV

SERVICES WHICH HELP TEACHERS MEET THE NEEDS OF PUPILS

The intent of this chapter is to discuss those shared services which tend to enhance the teacher's personal competencies. Included in this section are descriptions of consultant services provided to teachers and local districts by cooperative arrangement. Along with the knowledge explosion, the role of the educational specialist--consultant has become almost essential. To illustrate the point, consider that elementary teachers increasingly are being trained with an area of specialization, as opposed to the traditional concept of such persons being equipped to teach all subjects within their classroom. To compensate for the obvious inability of each teacher to be a specialist in all areas, the consultant has emerged as a welcome resource.

With recognition that teachers need to be informed of the newer developments in education and the realization that all teachers cannot annually return to the campus for retraining, many shared services projects have turned their energies to providing inservice training programs for the staff. An important component of this function has been the provision of professional libraries to assist the teacher in keeping abreast of modern developments and trends.

Curricular services and availability of instructional materials are included in this chapter as additional examples of approaches that can be utilized to assist teachers in meeting the needs of pupils.

Space does not permit all projects that provide these services to be described. Since it was not possible to evaluate the numerous projects which are providing these services in terms of selecting the outstanding examples, those reported here must be regarded as typical rather than exemplary.

Much has been and will be written with reference to the importance of good teaching and the value of a good teacher. Suffice to say, the primary responsibility of the classroom teacher is to guide the learning activities of children. The quality, quantity and availability of resources--men, money, or materials--to which the teacher has access may often be a decisive factor in the outcome of those learning activities. Since the classroom and the learning activities over which the teacher exercises such influence is of primary concern, the necessity for provision of supportive services which enhance that concern is evident. That teachers in remote schools often do not have access to such resources is also evident. It has become apparent that many shared service activities have been directed to function in the area of supporting teacher efforts to provide the best instructional program of which the teacher is capable. Since many districts are not of sufficient size or wealth to adequately provide such resources, the cooperative nature of sharing services is an obvious alternative to making these resources available.

Consultant Services

Consultive help to assist the teacher in planning effective lessons, working with children and developing new curricula are the essential activities involved in this category.

The Northeastern Utah Multi-District Cooperative Educational Service Center, Heber City, Utah, provides a multitude of educational services for their constituent districts. Among these services are special consultants in language arts and mathematics.

> We supply general consultant services to (1) one or more teachers by request, (2) an entire school, (3) an English department or (4) a district office.
>
> A model language arts program at any of these levels could include the total language arts program, or it could be limited to single or multiple aspects such as reading, literature, poetry, composition, lexicography, spelling, vocabulary, creative writing, dramatics, or various combinations. The same would be true in mathematics. We should stress, however, that these consultants are only provided on request--in this way the services are welcomed and generally are used.[1]

A regional service agency with its entire focus on provision of consultant service exists at Idaho Falls. Idaho. The Snake River Center For The Improvement of Instruction attempts to raise educational standards by updating procedures, encouraging imaginative teaching, broadening the concept of the functions of the schools and by making expert professional assistance available to participating districts.

> The Center is designed to supplement, not supplant, the efforts of individual districts. It will provide information from all available sources, such as universities, research centers, state and national agencies. Unlimited results can be accomplished when...educators work as a regional educational team to provide quality training and inspiration to both teachers and students.
>
> The purpose of the Center is to upgrade all educational areas and to help enrich instructional programs; to indicate what is possible in teaching when visual aids are used correctly; and to give direct instruction if desired.

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[1] Ken Ellertson, Director, Northeastern Utah Multi-District Cooperative Educational Service Center, Heber City, Utah, November 1968. November 1968.

Provided at Idaho Falls are consultants in mathematics, English, reading, counseling, social studies, science, graphic arts and library techniques.[1]

That consultants need not be restricted to educational professionals is illustrated in the CORPS for TIM project at Everett, Washington.

> The main emphasis has been an effort to (prepare) a comprehensive list of the various community resource services available to school districts; and to involve as many of these resources in various pilot projects as possible.[2]

CORPS for TIM (Coordination of Resource Personnel Services for Total Impact Movement) reasoned that since many associations, clubs and child welfare agencies make a contribution to the cultural life of the communities in which they are located, personnel from these organizations, if properly coordinated could have an effective impact on the educational output of the region. As a result, coordinative function was designed to make personnel from these groups available to the classroom teacher. The long-range goal of this project is to provide "realistic occupational education for vocationally oriented students in local school districts."

> The program, when in full operation, should provide several types of realistic services to youths in the 17 school districts of the region.
>
> For instance, it offers the direct involvement of industry, business and labor in setting employment objectives. It actively seeks summer employment experience and part-time steady work for students. It coordinates several community resources in providing inservice training and materials.[3]

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[1] Victor Cushman, Director, Snake River Center For The Improvement of Instruction, Idaho Falls, Idaho, November 1968.

Hal M. Gilmore, Director, CORPS for TIM, Intermediate District VIII, Everett, Washington.

[3] Marie Norman, Profiles of Innovative Projects in Washington Schools. Everett, Washington: Office of Superintendent of Schools, 1968.

Purchase of a van to transport two "Traveling Teachers" and their equipment enabled the Instructional Resource Center, Kalispell, Montana, to provide "specialized help to teachers in the selection of materials, projects, and topics in the instruction of science, music and art" for 26 rural schools ranging in size from one-room to five-room "where most of the teachers teach all subjects in three or more grades."[1]

Inservice Education For Teachers

To describe inservice efforts of cooperative projects apart from other components of the same projects presents a difficult task--most projects operate on an assumption that effective implementation of an idea is dependent upon understanding by the personnel involved. As a result, most of the projects identified by this study have some form of inservice component for making the teachers, administrators or school board members of the local districts aware of the program and its objectives, or to enhance the capabilities of the persons who must utilize and implement the concept. Some, of course, have upgrading of teachers through inservice as their major function, and it is these which are discussed here.

A survey of elementary and secondary teachers by the Catskill Area School Study Council relevant to the teaching of social studies led to development of Project PROBE. Findings of the survey indicated that the teachers in the region were "aware of and wanted to become more familiar with the new social studies. The teachers (in the survey) demonstrated a definite desire to improve their education. They desire more materials and training in using them."[1]

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[1] "Rural Education," PACE Report Magazine 1:9-11 (July-August 1968).

Project PROBE (Providing Resource Opportunities for Better Education), in turn, designed inservice courses and workshops by means of televised courses to "increase the knowledge and skills of social studies and elementary teachers in the context and methodology of economics concepts and problems--particularly of the rural disadvantaged." Planned for future implementation are inservice activities with focus on "science education, K-12; education in rural government; and utilization of museums as teaching resources."[2]

Noting that the "shared services projects in Georgia are not federal projects and are financed by the State of Georgia and the participating school systems," the Little River Educational Services Project at Lincolnton, Georgia, "recognized that the foremost purpose of the staff was to provide direct subject area services at the pupil or classroom level and to assist teachers through planned inservice instructional programs."

> A valuable part of the activities of the year was the professional growth inservice work in which the staff participated. One full day of such inservice included sixty-four teachers who felt the need of help in the area of reading. Other inservice days were held in business education, social studies and the 'proper methods of administering, scoring and interpretation of standarized tests.'[3]

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[1] Nancy S. Heldman, et al., Elementary and Secondary Social Studies Surveys. Oneonta, N. Y.: Catskill Area School Study Council, 1967, p. 21.

[2] William E. Whitehill, Director, Project PROBE, Oneonta, N. Y. in December 1968.

[3] Arthur J. Owens, Jr., Director, Educational Services Center, Lincolnton, Georgia.

With the challenge to "focus on operational problems and curricular development so that constructive change may take place in local education programs and to provide input of information and ideas which contribute to constructive self-examination and upgrading," the Eastern Illinois Development and Service Unit (EIDSU), Charleston, Illinois, has described the primary thrust of their project.

> The EIDSU program has been directed toward the development of an awareness on the part of administrators and teachers in the school districts which are participating. During the initial phase, efforts were directed toward studying problems on a regionalized basis and encouraging joint efforts on the part of participating school districts. Considerable progress has been made in this direction as evidenced by the pooling of countywide film libraries, the willingness of participating districts to participate in joint inservice programs, and their desire to participate in a wide variety of projects innovative to the ten-county area.

One important adjunct to the EIDSU program of inservice is the development of a summer program for teachers entitled "Professionals In New Roles." A primary goal of this summer program is, in itself, causing teachers from the 10-county area "to learn new inservice training techniques, including microteaching, use of videotape playback, study of models and participation in sensitivity training."[1]

Providing summer workshops for innovative approaches to teaching has also been a characteristic of the Texas Small Schools Project since its inception.

> The workshop offers a weeklong program of inservice training activities for teachers and administrators from small schools throughout the state. It is jointly sponsored by the Texas Small Schools Association, the Texas Education Agency and the University of Texas. Objectives of the 1968 Summer Workshop were to:

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[1] Dale F. Zorn, Administrative Intern, EIDSU, Charleston, Illinois.

(1) encourage thoughtful analysis of crucial issues confronting small schools
(2) provide information about available resources, practical teaching techniques and current curriculum materials
(3) offer opportunities for interaction among educators in solving common problems.

The 1968 Summer Workshop was the ninth in a series, but the TSSP does not limit its activities to summer inservice. Each of the regional centers (described in chapter II) sponsors periodic one-day conferences throughout the year in a variety of subject matter areas.[1]

Probably one of the more unique inserivce activities was developed by the Department of School Administration of the University of Nevada, Reno, Nevada. In cooperation with Western States Small Schools Project, the University has developed a telelecture course entitled "Critical Issues in Education." Available to member schools of the WSSSP, the course makes use of textbooks, discussion groups, tape recordings and transparencies coordinated with lectures presented via the amplified telephone. "The amplified telephone lecture series was devised as a means to reach undergraduates and graduate students who teach or are in administrative positions in remote areas of the state."

> There is no doubt in my mind that the inservice amplified telephone approach has tremendous possibilities. The secret is to send all information to be discussed to students ahead of time to review at their leisure. Then provide question and answer time to follow through with concepts, concerning the subject for that day. Vocal interaction is the key to a successful amplified telephone inservice project.[2]

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[1] Dale Carmichael, Director, Texas Small Schools Project, Austin, Texas.

[2] J. Clark Davis, Director, Research and Educational Planning Center, University of Nevada, Reno, Nevada.

Professional Library Services

From the projects identified by this study, interest in the establishment of "professional libraries" has been limited. This may be accounted for by the priority assigned such a service when others are compared. Another possible explanation could be the existence of such libraries in many schools at present, to the point where expansion of the professional library is no longer an imperative. Still another reason, based on comments of persons interviewed by this investigator, seems to be the recognition that greater personal involvement, through inservice programs and provision of consultants, has a more immediate and longer lasting impact on the behavior of the teacher. There seems little doubt, however, that college instructors of extension courses and those consultants who conduct the inservice programs desire more volumes and periodicals be available to the classroom teacher. The feeling exists that with access to a wide range of library materials, the inservice participant could bring a broader range of understanding and knowledge to the workshops. With this broader understanding as a starting point, a still wider range of topics and procedures could be assimilated and disseminated.

An instructional materials center has been established at Vernon, Alabama, to "provide teaching and library materials for 137 teachers in Lamar County. Supplementary books, films, transparencies, and audio-recordings are circulated via a mobile unit, along with inservice programs conducted to acquaint teachers with the appropriate use of such materials."[1]

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[1] Alma T. Turner, Coordinator, Multi-purpose Instructional Materials and Services Center, Lamar County, Vernon, Alabama.

Operational aspects of Project Innovate, Las Vegas, Nevada, include inservice training of teachers and administrators; provision of selected educational, legal, and technical consultant services; and establishment of professional libraries in the 17 school districts served. The libraries include books and magazines especially related to the effective use of instructional television.[1]

A research center to provide schools and teachers from seven rural counties with educational research data exists at Manistee, Michigan. In addition, an education journal (locally produced) is disseminated throughout the region emphasizing "area history, industries, cultures and arts." Teacher supplements are included to be used in teaching units.[2]

Mountainous areas and drifting snow hamper the provision of consultants to schools in the Lassen County, California, area so alternative means of disseminating innovative classroom projects were needed. One alternate approach (which could be construed as a resource library) was the design of a student newspaper entitled the "Circuit Rider Review." This publication is prepared by students setting forth activities of "the itinerant educational consultant (circuit teacher) who assists teachers in designing lessons." Not only has this activity heightened student interest in writing, but, through wide dissemination, has "breathed life into otherwise lethargic classrooms."[3]

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[1] John Ball, Office of Instructional Media, Clark County School District, Las Vegas, Nevada.

[2] Pacesetters in Innovation, Fical Year 1967. (OE-20103) Washington, D. C.: Superintendent of Documents, U. S. Government Printing Office, 1967.

[3] Robley Aspegren, Director, Circuit Rider Project, Lassen County, Susanville, California.

In addition to a "fully equipped media center and staff to offer expert assistance to teachers and serve as a dissemination center for educational resource material," the supplementary education center at Lumberton, North Carolina, established a "curriculum library to offer teachers materials for self-improvement and program development--as well as information on new methods and techniques."[1]

Curricular Services and Materials

Separation of curricular services from media and materials as discrete services which help teachers meet the needs of pupils is not an essential undertaking of this study. Rather, with the recent development of educational technology, the preparation of supplementary instructional materials has become the major curricular service receiving attention.

If one defines curriculum as "those activities under jurisdiction of the school provided for the extension of the child's education," then each shared service project thus far discussed has had curriculum development as one of its basic objectives.

The blending of curricular services with the provision of media and materials to implement the curricular offering is exemplified by the "Art by Telephone" project of Mesquite, Nevada (discussed in chapter III).

Somewhat typical of many projects is the Supplementary Educational Services Center at Ellensburg, Washington. Established to serve a nine-county area of central Washington, the Center:

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[1] Pacesetters in Innovation, Fiscal Year 1967. (OE-20103) Washington, D. C.: Superintendent of Documents, U. S. Government Printing Office, 1967.

> Produces instructional materials that have been designed to facilitate individual instruction and improve pupil achievement; furnish instructional equipment needed to utilize the instructional material; and provide inservice consultant services and training for teachers. Service area schools indicate the nature and kind of materials needed for their specific curriculum.[1]

To describe the Central Washington Center as typical in no way detracts from the value of this type of service, instead, when one considers the extensive creation of such projects--each of which was based on a perceived need among the constituent districts--it becomes apparent that the need of this service is among the more important to be provided for cooperatively.

Curricular services are provided in a variety of ways. At Bayard, New Mexico, semitrailer vans transport film and other projection aids, curricular materials and instructional aids to seven school systems in twenty-one towns and villages.

> Mobile reproduction services, mobile consultation services, and mobile science laboratories stocked with BSCS materials are provided throughout the region. Curriculum services for remedial reading, guidance, arithmetic, physical education, industrial arts and astronomy are also available. Training and research services include the development of demonstrations to be sent with the appropriate vans, and inservice training is provided at a media instruction institute.[2]

A two-week workshop designed to enable teachers from five counties to improve their skills in setting educational objectives and evaluating student performance is conducted at Hanford, California.

> Teachers are given inservice training in curriculum development and development of materials for supplementing science instruction. Programed group instructional materials

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[1] Donald J. Murphy, Central Washington State College, Ellensburg, Washington.

[2] Haskell Smith, Superintendent, Cobre Public School District, Bayard, New Mexico.

> are used and individual instruction is given special attention. In a workshop, teachers learn the instructional systems approach and the use of programed group-tutorial materials.[1]

And in St. Cloud, Minnesota, an educational "services council" has been established to serve a 15-county area. A professional library of mathematics materials serves as a basis for inservice courses and demonstrations.

> A central media/curriculum development center has been instituted. The council will provide leadership in all areas of educational research and experimentation in the region, with emphasis on greater interaction and communication between the schools.[2]

SUMMARY

The variety of approaches utilized by cooperative groups to provide services "which help teachers meet the needs of pupils" is almost endless. That the services are needed and accepted when available is evident from the projects examined by this study. The findings of Project PROBE in their survey of teachers of social studies to the effect that "teachers were aware of and wanted to become more familiar with" new approaches is only substantive evidence that teachers do desire to upgrade their performances. Given the opportunity and the resources teachers will at least devote more of their energies to improvement of instruction--and that, after all, is their primary task.

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[1] Pacesetters in Innovation, Fiscal Year 1967. (OE-20103) Washington, D. C.: Superintendent of Documents, U. S. Government Printing Office, 1967.

[2] Fred P. Roessel, Director, Educational Supplementary Center, St. Cloud, Minnesota.

CHAPTER V

SERVICES TO FACILITATE THE EDUCATIONAL PROGRAM

Numerous services have been provided on a shared basis that must be regarded as supplementary to the instructional program. Among these services are such activities as personnel recruitment, cooperative purchasing, research, assistance with organizational planning, development of channels to provide additional programs, leadership training and ancillary services. As in previous sections of this report, the activities cited are not purported to be a complete listing of all those in existence, but rather to illustrate the types of services that lend themselves to cooperative effort.

Personnel Recruitment

Several regionally established service units have found the need to recruit high quality instructional personnel to be a particularly appropriate activity for a cooperative effort. At Plymouth, Wisconsin, CESA 10 has designed and produced an attractive brochure extolling the advantages of teaching and living in the area served. Distributed to a wide variety of teacher placement agencies and colleges, the brochure invites teachers to submit applications to the Agency. The Agency in turn advises the local administrator of the teacher's interest and qualifications. Through this approach, local administrators are relieved of the responsibility of preparing "vacancy notices" and the time as well as money spent in publicizing such vacancies. Not only does this service enable the administrator to concentrate his efforts on other local needs, but it provides him with a wider selection of candidates than might otherwise make application to teach in a rural area. The design of the brochure in turn creates an important first impression to the candidate that can only cause him to feel he is an important member of an active organization.[1]

An approach similar to that of CESA 10 is utilized by the ten-county area served by EIDSU (Eastern Illinois Development and Service Unit). The Southeast Metropolitan Board of Cooperative Services (SEMBCS) of Denver, Colorado, provides a roster and information regarding substitute teachers, thus relieving the local administrator of the responsibility of recruiting, orienting, training and locating such personnel.[2]

Providing better prepared teachers for rural schools is the primary focus of the Duo-Specialist Project at the University of Arizona, Tucson. Assessing the need for educational specialists (e. g.,reading, counseling, special education, library) in rural schools, the University of Arizona, with support from the Kellogg Foundation, in cooperation with school districts from communities such as Buckeye, Mingus, Kearny, San Manuel, San Simon, Benson, Fort Thomas and Tombstone, has "recruited for extra training persons already committed to a career in the nonurban communities, and offered a tailor-made, one-year program for each person recruited--concentrating the training in two areas of greatest local need."[3]

[1] Charles H. Wileman, Administrator, Cooperative Educational Service Agency Program, State Department of Education, Madison, Wisconsin.

[2] James Camaren, Director, SEMBCS, Denver, Colorado.

[3] Pat N. Nash, Director, Duo-Specialist Project, University of Arizona, Tucson, Arizona.

Cooperative Purchasing

Each of the projects identified by this study has had but one basic motivation--providing additional services to the schools through the most economical means. By cooperatively purchasing a service, the local districts have recognized that their students can enjoy many benefits of educational improvement previously thought restricted to wealthy or urban districts. Apart from purchasing a service, some groups have recognized the savings to be had by quantity purchasing of supplies and equipment.

With no formal organization to work through, seven districts in North Central Montana discovered that by placing their custodial supply orders through one of the districts, savings ranging from 10 to 25 percent resulted. The quantity discount, plus the reduction of freight costs on small shipments enabled the districts to allocate resources to other needed services.[1]

While not a shared service in the strictest sense, simply because the entire state operates as a single district, the State of Hawaii handles all library book orders, provides cataloging and index card preparation in a central location.

> At present books only are handled for the schools. Filmstrips and recordings are processed for public libraries. Eventually it is planned that these services also will be extended to school libraries. Due to mechanization, books are prepared for use in less time for a smaller cost. However, the greatest service to all libraries, particularly those in 146 rural schools in the state, is that the time formerly spent by the librarians on these routine tasks can

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[1] Ray L. Peck, Director, Pupil Personnel Services Project, Big Sandy, Montana.

> now be spent in helping pupils and teachers locate and use materials to support the curriculum and for individual needs.[1]

At the Mid-Columbia Educational Services Center in The Dalles, Oregon, centralized purchasing of audiovisual equipment has resulted in savings of "up to 25%."

> We drop-ship orders directly to the school since we have no staff nor facilities for warehousing and then distributing. Our intention is to go into the area of school supplies by having the local districts provide us with a list of their needs, and then we will place the quantity order for bid. We are developing a catalogue of the more commonly used school supplies, and the local districts will simply check their needs--a secretary here will consolidate the requests into one order for submission to the suppliers. At the present time, however, we have only operated in the area of audio-visual equipment and materials.[2]

And, as cited in chapter III, CESA 5 of Elmwood, Wisconsin, has realized savings from 6 percent to 12 percent on "bid buying of school lunch supplies," and has found it desirable to submit orders for "general school supplies, paper items, office supplies, art supplies, athletic supplies and first aid supplies" for quantity bids.

Research

> Business and industry...budget from five to fifteen percent of their total expenditures for research. Sweden allocates two percent of its education budget to research. In the U. S. our expenditure for research has never exceeded one-fifth of one percent (of the education budget).[3]

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[1] Grace Hightower, School Library Programs in Rural Areas. Washington, D. C.: Department of Rural Education, National Education Association, 1966, p. 16-17.

[2] W. J. Tobin, Director, Mid-Columbia Educational Services Center, The Dalles, Oregon.

[3] Lindley Stiles, "School Research Shorted," Phi Delta Kappan 50:366 (February 1969).

Research, however, is a major emphasis of some shared service projects. The Upper Midwest Small Schools Project at Grand Forks, North Dakota, sponsored a workshop for administrators of small schools devoted to "investigating some solutions to the problems that plague small schools."

> Out of that workshop emerged a voluntary group of small schools banded together in a mutual concern for the improvement of the educational programs in small schools. These schools have agreed to investigate any suitable method through which instructional programs can be improved, and to assist in the evaluation of these methods in their schools.

From the Upper Midwest Small Schools Project (UMSSP) has come a wealth of information from which sound educational decisions of concern to the member schools can be made. An example of the kind of data gathered is revealed by responses to the question "What has been the greatest deterrent to the improvement of instruction in your subject area?"

> Most teachers feel that the greatest deterrent to improvement of instruction is the inability of many teachers to individualize their teaching. (The second greatest deterrent) to be the apathetic attitude and inflexibility of teachers as well as the general public. The most pressing need of teachers desiring to improve their curriculum is assistance--resource individuals that can work with the teachers in the classroom can probably offer more longer-lasting help than through inservice programs, workshops, or inspirational messages at the beginning of the year.[1]

At Missoula, Montana, the School Planning Center provides information resulting from research to participating school districts on a contractual basis. Schools wishing to have information on which to base administrative decisions contract with the school planning service which, in turn, sends a team of researchers to the district to investigate the current status of the question at hand. A report from this team includes findings as well as recommendations based on national research.[1] At the University of Oregon, Eugene, Oregon, a similar service is provided by the Bureau of Educational Research and Service under the direction of Kenneth Erickson.

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[1] A. W. Sturges, Executive Secretary, Upper Midwest Small Schools Project, Grand Forks, North Dakota.

Another kind of research that has been completed on a cooperative basis is that done by the Catskill Area School Study Council at Oneonta, New York. A list of some of their research titles should give an indication of the nature of their work:

> Helping Children Learn How To Study: A Handbook for Teachers
> Report on the Audio-Visual Survey: Project Probe
> A Case Study: An Analysis of the Otsego-Unadilla Reorganization
> School Aides At Work
> An Inventory of Needs of Teachers of Economics
> Secondary Science Survey: Project Probe
> Elementary and Secondary Social Studies Surveys: Project Probe
> Multiple Classes: Learning In Small Groups
> An Inventory of Needs of Teachers of Elementary Science[2]

And in Valparaiso, Florida, a cultural center, established in a rural area, has in the development stage a "creativity laboratory to conduct research concerning the nature of the creative process."[3]

Organization Planning

Some evidence exists that more efficient instruction occurs when the teacher individualizes.[4] Efforts to create situations in which the teacher can individualize instruction have received a great deal of attention in recent years. Among the more prominent approaches are team teaching, nongrading (or ungrading)--sometimes called continuous progress, modular scheduling and individual study.

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[1] Ronald Allen, Assistant Professor, Northern Montana College, Havre, Montana.

[2] Lawrence Heldman, Director, Catskill Area School Study Council, Oneonta, New York.

[3] Bryan Lindsay, Okaloosa-Walton Junior College, Valparaiso, Florida.

[4] See Susquehanna Project results described in chapter VI.

One of the earlier efforts to assist small schools with internal reorganization was that known as the "multiple class" project again at Oneonta, New York, under the auspices of the Catskill Area School Study Council.

> By definition a multiple class is one in which the teacher guides the learning endeavors of two or more groups of pupils in two or more courses in one room and in the same period of the daily schedule.
>
> The multiple class promotes a high degree of small group and individual instruction.[1]

Another approach to individualizing instruction is utilized extensively in the Texas Small Schools Project member schools. The practice of providing local supervision to correspondence courses obtained from a nearby college or university enables the pupil to explore those topics of special interest even in circumstances where provision of a class for such a course would be financially prohibitive.

The Western States Small Schools Project has attempted several approaches to individualization. Among them are "programed English" at Des Moines, New Mexico, High School; "programed mathematics" at Cloudcroft, Quemado, and Dora, New Mexico, schools; the "nongraded elementary school: the continuous progress program" at Largo Canyon school in western Rio Arriba County, New Mexico; and a "computer generated modular schedule" at

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[1] Evelyn Hodgdon, et al., Multiple Classes. Oneonta, New York: Catskill Area School Study Council, 1961, p. 3.

Fredonia, and Patagonia, Arizona--Clear Creek, Mancos, and Meeker, Colorado--and Pahranagat Valley and Mesquite, Nevada.

> The combination of continuous progress education, non-graded curriculum, self-instructional materials, independent study opportunities and multiphased curriculum is an effective approach to the individualization of instruction in small schools.[1]

Developing Channels To Provide Additional Programs

Another area in which shared services have demonstrated effectiveness is in the "catalytic" arena. By causing persons to mix and pool their ideas, new programs have been established for rural youth, and new solutions to old problems have been devised.

One "old" problem which perennially plagues rural schools is the question of how to challenge the academically able student. The Texas Small Schools Project, the Catskill Area Project, and the Upper Susquehanna Valley Program (each discussed elsewhere in this report) have realized success in diminishing this problem through Gifted Student Seminars. In Texas, students (usually two to four from any one school) are excused during the school day and transported to a nearby college or junior college. There they are exposed to "college level discussions of such topics as literature, fine arts, psychology, advanced science and advanced mathematics."

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[1] Rowan C. Stutz, Coordinator, The Western States Small Schools Project, Utah State Department of Education, Salt Lake City, Utah. See also: Rowan C. Stutz and Russell G. Merrill, Individualizing Instruction in Small Schools. Salt Lake City, Utah: Western States Small Schools Project, 1966.

In the Upper Susquehanna and Catskill projects, the programs have become known as Saturday Seminars from the practice of inviting students to the college campus on Saturday mornings for two-and three-hour sessions of in-depth discussions.[1]

Using an existing museum of natural sciences, fifty-five school districts in northeastern Vermont have provided a series of science enrichment programs, along with a "junior curator" program, to motivate students to the study of science. Teachers have been given inservice training and consultant help by the museum staff.[2]

Enrichment is also the problem to which a cooperative program in Council Grove, Kansas, has addressed itself. Involving 2200 elementary students from rural schools, a mobile unit has been equipped with media and materials, illustrated books and realia on the culture, language and geography of Latin America. Equipped with far more material than any one of the schools alone could provide, the mobile unit enables all the youth in the area to have access to extensive resources.[3]

Through a cooperative endeavor, a "space and earth science center" has been established in an area "characterized by low-level aspiration and a high dropout rate."

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[1] For an objective evaluation of these "gifted child programs," one should see: Robert M. Porter, A Decade of Seminars For The Able and Ambitious. Oneonta, New York: Catskill Area School Study Council, June 1968.

[2] Frederick Hold, Museum Director, St. Johnsbury, Vermont.

[3] Pacesetters in Innovation, Fiscal Year 1966. (OE-20103) Washington, D. C.: Superintendent of Documents, U. S. Government Printing Office, 1967.

> The science center includes a planetarium for the teaching of astronomy, and an outdoor laboratory. Two relocatable classrooms are adapted for use as a laboratory. Specimens, models, aquariums and science displays are housed in one unit, and the other is used for audiovisual aids, and as a small lecture room. Students are employed as helpers in planting, development and maintenance of the science center, and serve as guides on weekends and during summer periods.[1]

Four districts in western Washington State have developed a "flying classroom" and modified the curriculum to include aerospace education at the fifth and sixth grade levels. Chartered air flights take these youths over the state of Washington to provide the students with an airborne view of the "close relationships of history, geography, arts and sciences."

> The flying classroom concept in itself will attract many students who are bound to find new motivation in studying such subjects as conservation, land use, geology and geography, transportation, communication, water resource development and recreation.[2]

These are but a few of the new programs to materialize as a result of the catalytic action provided by shared thinking. It is conceivable none would have emerged had the channels of communication for pooling of ideas not been provided through shared service activity.

Ancillary Services

Defined as subservient, subordinate or auxiliary, several services which facilitate the educational program are worthy of mention. Not the least is the influx of data processing.

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[1] Ibid.

[2] Marie Norman, Profiles of Innovative Projects in Washington Schools.

The Curriculum Enrichment Center at Norwich, New York, has recently added a data processing center as a supplement to the existing library and educational communications departments at the Center.

> This modern system will allow the CEC to furnish member schools with complete up-to-date inventory catalogues by subject, author and title of all resources. Library processing, ordering, invoicing and billing will also be provided by this department.
>
> In addition, the data processing department is able to offer member schools machine processing in the fields of (1) business office application (payrolls, personnel records, supply requisitioning, cost accounting, state reports and reports to local boards), and (2) student records (census reports, attendance recording, grade reporting, posting of permanent records, testing and test analysis, and student scheduling).
>
> The efficient use of data processing services results in teachers freed from clerical tasks for more productive duties; providing more complete records at no extra cost; neater, more legible reports; centralized record keeping; availability of more information for guidance counseling; and measurable effectiveness of teaching methods and school systems.[1]

One of the most comprehensive studies located detailing the uses of data processing in education is that known as the Price Waterhouse Report to the State Superintendent of Schools, Baltimore, Maryland. This report carefully details the application of automatic data processing techniques to a State of Maryland Educational Information System. The report, officially titled, A Plan For The Development of a Maryland Educational Information System, Baltimore, Maryland: Price Waterhouse and Co., had as its objectives:

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[1] Richard F. Heller, Director, Curriculum Enrichment Center, Chenango County Office Building, Norwich, New York.

(1) to study and evaluate existing data processing applications and resources at the local level.
(2) to develop a uniform plan for systems development and for obtaining equipment support for new applications.
(3) to outline in summary form a network of related systems according to an integrated scheme for fulfillment of statewide objectives while providing local school systems with sufficient autonomy to achieve local data processing objectives.[1]

The 109 page report warrants examination by any district, region, state or multistate organization contemplating the addition of data processing to their services.

Another service found desirable by some shared service projects is in the realm of personnel development, or training. Financed by the Alabama Association of School Administrators, a program for training future administrators has been initiated in the form of an "intern" project. It is hoped that such persons will provide a nucleus of practicing administrators accustomed to utilizing newer educational techniques to whom future interns can be assigned.[2] A similar program for training of secondary principals is sponsored in Oregon by the Oregon Secondary School Principals Association.

Operational Impact 7, of Manistee, Michigan, provides "teacher recruitment as well as inservice training to develop educational leaders." In addition, substitute teachers are employed to obtain released time for teachers to "visit and work in innovative and exemplary education projects in other areas."[3]

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[1] James A. Sensenbaugh, State Superintendent of Schools, Maryland State Department of Education, Baltimore, Maryland.

[2] Frank Newell, Educational Leadership Program, Birmingham, Alabama.

[3] Maurice Goodreau, Director, Operational Impact 7, Manistee, Michigan.

Professional and "paraprofessional preservice and inservice training" are adjuncts of the previously discussed Center for Exceptional Children at Caldwell, Idaho. And at Havre, Montana, a continuous "training program for teacher aides" is a cooperative venture of Northern Montana College and school districts from a 10-county area.

Finally, the Educational and Cultural Enrichment project at Macomb, Illinois, has been established to "offer improvement of administrative organization, school services, activities and cultural experiences." Activities of the several centers include "flexible class scheduling, efficient bus routing, and identification of ways to raise the cultural and educational sights of the communities."[1]

SUMMARY

With so may educational needs becoming more visible, both to the educator and to members of the general public, new ways of responding to these needs must be found. One of the ways in which this response is being made is through the combined thinking of people willing to concentrate their efforts toward alternate solutions. Of the many projects discussed in this report, not any one has presumed to fulfill all the needs identified, but rather, through local assessment of the needs peculiar to that particular region, a multitude of approaches has collectively emerged.

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[1] Jack A. Peterson, Western Illinois University, Macomb, Illinois.

CHAPTER VI

EVALUATION OF SHARED SERVICES

Perhaps one of the major arguments that can be fairly made for shared services is that additional services can be made available to students in rural areas at a cost not prohibitive. While cost must be considered, one should not confuse getting something inexpensive with getting something needed at the lowest possible cost. The provision of additional services is almost certain to require additional expenditures, but through cooperative effort the costs for these services is equalized to the point where small districts can now enjoy the benefits to be derived from them.

Statistically defensible data to support, or reject, the benefits of shared services is limited. Few controlled studies to show the outcomes of a single shared activity exist. In the words of Lee Spuhler, "I know why they call it hard data, because its so darned hard to find."[1] Some evidence does exist, however, and the results are condensed here to give the reader an opportunity to examine the attempts that have been made to evaluate shared services.

One caution must be recognized in examining the data, however, and that is the obvious fact that it is hazardous to give total credit to any one activity for effecting change when so many factors tend to influence social behavior. For example, to credit the introduction of an attendance officer to the region as being the only factor to result in improved attendance, tends to overlook the interest of parents, the leadership of the school, and perhaps a renewed concern by the pupils themselves.

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[1] Lee Spuhler, "Evidence of the Outcomes of Shared Services," from a report presented to the Conference on Rural Shared Services, Spokane, Washington, October 14-16, 1968.

A second precaution to be observed in the interpretation of the data presented lies in the influence of the famous "Hawthorne Effect." Personnel studies completed during the 1940's by F. J. Roethlisberger and others at Harvard[1] indicated that persons receiving "unusual or renewed" attention tend to surpass their previous performance. One might rationally apply this same effect to the behavior of persons involved in the special studies reported below.

Statistical Data Illustrating Outcome of Shared Service Activity

Upper Red River Valley Project:[2]

The Upper Red River Valley Project, Grand Forks, North Dakota, (URRVP) provided participating schools with a teacher reaction questionnaire. Eight hundred and two usable responses were grouped into two categories: those who used the services (experimental) and those who did not (control).

Psychological Services

While a significant difference was found in the responses of the experimental and control groups to the question concerning the overall value of the Center, it was the control group that responded more valuably. But when studying the adoption items, the experimental group were found to have a statistically higher mean response to services rendered by the Center's psychologist and social worker, the two categories most likely to provide psychological services. There were no meaningful results found from the questions about the value of the services.

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[1] F. J. Rethlisberger, Management and Morale, Cambridge, Mass.: Harvard University Press, 1947; and F. J. Roethlisberger and W. J. Dickson, Management and The Worker. Cambridge, Mass.: Harvard University Press, 1944.

[2] Edward Krahmer, Evaluation Report Upper Red River Valley Project. Grand Forks, N. D.: University of North Dakota, Bureau of Education Research and Services, 1968.

The adoption question concerning services rendered by the social worker (Were the home visits by the Center's social worker of any value to your school?) was significant with a higher mean response toward adoption by the experimental respondents. Interestingly, a significantly higher mean toward adoption of inservice training (reading workshops; science workshops; audiovisual workshops; innovative practices workshops; and art workshops) was reported by the control group.* Dividing respondents into secondary and elementary, there was no significant difference between the experimental and control groups toward the overall value of the Center, but the secondary level respondents reported a significantly higher mean adoption response for consultation for teachers regarding problem youngsters, services rendered by the psychologist and social worker, and the videotape recorder. The questions concerning psychological testing and evaluation of students, and followup of the psychological testing were responded to as significantly more valuable by the experimental group.

The experimental group reported a significantly higher adoption level for services rendered by the psychologist and by the social worker, but a significantly lower adoption level for inservice training and curriculum consultant services.

Counseling and Guidance Services

Numerous services were provided under this heading. The subheads shown were of particular importance and will be identified separately.

Consultant Services. The experimental group reported the Center to be significantly more valuable than did control respondents. The adoption questions showed a higher adoption value for counseling and guidance, services rendered by psychologists, and curriculum consultants.

Vocational Planning. These services were provided primarily to seniors in twenty-nine schools in the region served by the Center. The attitude of the experimental respondents to the overall value of the Center is significantly positive. The adoption questions find the experimental respondents very significantly higher on mean adoption value for counseling and guidance, inservice training and videotape recorder provision.

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*It must be noted for clarification that the question asked the respondent to indicate the degree that "This service, or ideas from it, would be of value in my situation."

Elementary Counseling. Twenty-three schools received this service. Very little difference existed between the two groups on the overall value of the Center. While the experimental group generally had a higher adoption value, this was statistically significant for consultation for teachers regarding problem youngsters.

Advisory Workshops. Eleven schools held advisory workshops in guidance and counseling. The experimental group responded significantly more valuably to the questions concerning the overall value of the Center. Concerning the adoption items, the experimental group had a significantly higher mean adoptions response to counseling and guidance and vocational planning.

Services in Reading

Reading workshops, consultant assistance with individual problems and establishing group reading programs have been provided. Workshops were held in eighty schools. It is not surprising that a highly significant positive overall value was attributed to the Center by the experimental group. Of the thirty-seven schools that utilized reading consultants, there was a significant positive attitude toward the overall value of the Center, but a lower mean adoption value for almost all the questions under consideration. The experimental group responded less valuably than the control group on reading workshops, and reading consultants. The questions on adoption of services found significant differences between mean adoption values for counseling and guidance, and videotape recorder provision, but for these two items, the adoption value was lower for the experimental group than for the control sample.

Several additional services were provided by the URRVP Center. Among these were (1) science workshops, (2) audiovisual workshops, (3) innovative practices workshops, (4) art workshops, (5) art consultants and sculpture demonstrations and (6) curriculum consultants. Data is available for each of these categories but seems to show little significant differences.[1]

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[1] Edward Krahmer, Evaluation Report Upper Red River Valley Project. Grand Forks, N. D.: University of North Dakota, Bureau of Education Research and Services, 1968.

Wide Horizons Project

The Wide Horizons For Rural Youth Project, Colville, Washington sought to provide vocational information to rural youth in the area. In the original planning:

> Results of a questionnaire showed that in no case did a student indicate that he would turn to school personnel for information regarding career and vocational opportunities. This situation has been completely reversed.[1]
>
> An evaluation questionnaire was prepared and sent to 28 administrators--18 replied. They were unanimous in reporting that the program should be continued. The services were rated excellent or above average by 88 percent of the administrators. Of the questionnaires sent to 160 students, 154 were returned. Of those returning the document, 98 percent indicated the project should be continued; 43 percent of those responding reported that finding vocational interest areas had been of most help to them; second in importance was the help they received in the area of post-high school vocational planning--36 percent.[2]

Educational Media Center For East-Central Alabama

Among the activities of the Auburn, Alabama, Educational Media Center was a series of inservice projects designed to "stimulate and promote planned change in the school programs." The basic objective, "stated in behavioral terms, was to enable participants to plan and provide appropriate media for specific learning objectives in their situations."

> The threefold objectives predicated that such change should take place on an affective, or attitudinal level; on a cognitive knowledge level; and on a cognitive application level.

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[1] Ruby Dubois, County Superintendent of Schools, Colville, Washington.

[2] "Wide Horizons For Rural Youth," PACE Report Magazine 1:8 (July-August 1968).

Hard data collected from the projects included pre- and posttest measures of three scales from the 16 Personality Factors Questionnaire; pre- and posttest measures from an evaluatively oriented Semantic Differential; a semistructured criticism questionnaire; and an evaluative form filled out by each (presentation) team.

Three communities served by the EMC were selected because they were considered exemplary of the services offered to a seven-county area. Phenix City is largely urban in nature and features an economy based primarily on industry. The system is independent and features a number of elementary schools and two main high schools, one primarily white, and the other primarily Negro. Participation was representative. The Roanoke school system is also an independent system of two elementary schools and one high school, with a total district enrollment of 1250. The eclectic system is part of the Elmore County School System. The community is rural in nature, and the school consists of a single plant in which both high school and elementary are housed. Enrollment is approximately 800 in twelve grades.

Results of the evaluation of Roanoke reveal no statistically significant changes occurred in the MTAI scores for the total group. The data demonstrates that members of the group experienced a slight movement toward venturesome on the H scale of the 16 P. F. This shift, however, places the group in the average range and the difference was not statistically significant. Much the same can be said about the Q1 scale which indicated the teachers experienced a slight shift toward experimentalism but not to a significant degree. It was recognized, however, that the Superintendent of the Roanoke system did not enthusiastically back the attempts implemented by the media staff or the efforts of his teachers toward engaging in any new approaches or attempts to change what was traditional to their system.

Results obtained from the eclectic group demonstrated significant changes on two of the three scales employed. The H scale comparison points out that the group involved experienced a significant movement toward venturesomeness, while the Q2 scale comparison represents a significant movement toward group dependency. It can also be seen from the data that some movement from a conservative toward a liberal tendency was experienced on the Q1 scale. In summary, the data from the 16 P. F. reveals that the eclectic group experienced change from a tendency toward reserve and shyness toward one of venturesomeness and boldness during the course of the project. Secondly, the group demonstrated a movement toward an experimental and critical nature. Finally, the group demonstrated a significant change toward dependency. The inference to be made here in terms of teaching approaches could be that the group became more willing to look at new ideas, became more critical of methods and approaches, and attempted to temper, to a greater degree than before, all their efforts by subjecting them to the thoughts, approval and efforts of other group members.

Data obtained from the Phenix City group indicates that some changes took place, much of the nature as that in the eclectic group, but not to a statistically significant degree.[1]

Upper Susquehanna Valley Program of Cooperative Research

With the expressed objective of exposing school administrators and teachers to, and giving them experience with, the total process of educational research, it would seem natural that data should be available. Under a grant from the Ford Foundation Fund for the Advancement of Education, Bucknell University initiated a program involving 10 public school systems in research projects including elementary science; secondary science; automated instruction in spelling; nongraded primary program; and an enrichment program for superior secondary students.

> In the "improvement of science instruction: grades 4, 5, 6 project" pupil achievement was measured by the STEP Elementary Science Test, the Acorn Achievement Test, and the Bucknell Elementary Science Test. While the scores on the STEP test did not favor the control groups, none of the differences in gain on this test significantly favor the experimental group. Comparisons based on the Acorn and Bucknell tests showed significant differences favoring the experimental over the control groups. Likewise, pupil gains in achievement were positively related to the amount of time and attention devoted to their school districts (by the University), gains being greater among pupils in those groups where science consultants conducted both demonstration and teaching seminars; gains were less in those classes where teachers had attended seminars and there was no demonstration teaching. The use of science consultants appears to be an effective way of introducing an elementary science program in terms of pupil achievement and teacher reaction.

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[1] T. J. Michels, James A. Barrum, and Bobby T. Welch, The Second Year Evaluation of Selected Long-Term Inservice Instruction As Provided by the Educational Media Center For East-Central Alabama. Auburn, Ala.: Educational Media Center, July 1968.

In the "secondary science improvement project" a comparison of student achievement scores on the Cooperative Physics Test administered at the end of the first year did not provide evidence that the use of the Harvey White physics films contributed to increased student achievement. However, a comparison of the combined mean gains on the Bucknell physics tests at the end of the second year showed that combined mean gain for the schools using the films was 15.04 with a standard deviation of 11.69, while the combined mean gain for the schools not using the films was 6.24 with a standard deviation of 10.21. From this it could be concluded that the cooperative use of the Harvey White physics films in small rural high schools can upgrade the teaching of high school physics as measured by student achievement. Student and teacher attitudes related to the use of the films were consistently favorable.

The secondary science program has clearly demonstrated that a cooperative group of small rural districts can economically and effectively upgrade the teaching of science in their high schools by enlisting the services of a competent science consultant and/or the use of carefully selected teaching films. Of equal importance, *it has demonstrated that by working cooperatively, it is feasible for small rural high schools to introduce various methods for upgrading instruction methods which would be economically impractical for any one of the schools working alone*. (Italics added).

In the "nongraded primary project" it was proposed that the merits of the nongraded organization be studied under the conditions of a controlled experiment. All teachers in the system, administrators and parents of the elementary pupils were oriented and assured that nongrading would proceed on a year-by-year basis, one grade per year, and that there would be no sudden or radical revisions of the school's program. Pupils were randomly assigned to either the experimental or control groups. The result was 26 children in the nongraded program and 26 in the conventional grade organization. Teachers, likewise, were randomly assigned with all participating in the workshops and receiving the assistance of a reading consultant in selecting reading materials, carrying out their reading programs and in the observation and placement of pupils. Six teachers were involved. At the end of the third semester of the experimental period, pupils in the experimental and control groups were compared on the basis of their performance on (1) the Lee Clark Reading Test, and (2) the Paragraph Meaning and Word Meaning tests of the Stanford Achievement Tests. Statistically significant differences, favoring the nongraded group were found on all three tests. It seemed reasonable to conclude that differences in pupil achievement could be attributed to the effects of the nongraded organization. This experiment also demonstrated that such research need not be restricted to the so-called progressive schools systems with young staffs, modern equipment and ample funds.

> The "enrichment program for superior high school students" was composed of five students each from each of five small high schools in the two most rural counties of the area. Able juniors and seniors participated in a two-hour seminar each Saturday morning for thirty weeks on the Bucknell University campus on significant literature. The second year an additional 25 junior and senior students from 7 secondary schools were selected to participate in a year-long seminar in modern mathematics. Only five of the one hundred students in literature, and ten of the seventy-five in mathematics have failed to complete the program.
>
> In the "programed automated instruction in spelling project" students from two sixth grade classes were randomly assigned to experimental and control groups within each classroom. The failure to attain a significant difference between the control and experimental groups when using the Metropolitan Spelling Achievement Test as a measure of retention may have resulted from providing all children with the word list on Thursday of each week, possibly reducing measurable difference on posttests; and although the MSAT may have some validity as a criterion measure in this experiment, a test composed of words taken directly from the units would have greater validity.

The following statement indicates how well the project met the overall objective of exposing teachers and administrators to the total process of educational research.

> It was hoped that all of these projects would result in improved educational procedures but in the case of some projects, the elementary and secondary science experiments in particular, there was the additional hope that the less well-prepared teachers might be brought closer to the level of the more capable teachers. A differential change was noted in some instances but it appeared to be generally the case that the superior teachers made better use of the opportunities and facilities provided them and the gap between the able teacher and the less able tended to increase.
>
> Since other outcome variables reveal that school boards and teachers did modify their behavior in the direction of a greater interest in and dependence upon research on curricula and instruction, and since several parts of the program have continued beyond the terminal date of the Foundation's grant, it may be concluded that the scales used were not sensitive to and/or appropriate for evaluating the major hypothesis of the study.[1]

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[1] J. Charles Jones, Wendall I. Smith, and J. William Moore, The Upper Susquehanna Valley Program: Three Years of Cooperative Research. Lewisburg, Pa.: Bucknell University, 1962.

Flint Hills Elementary Science Program

Designed to improve the science programs and instruction in sixty elementary schools in seven counties of East-Central Kansas, the Flint Hills Elementary Science Program Development Project, with headquarters at Kansas State Teachers College, Emporia, Kansas, has provided consultant service to teachers; inservice programs; extensive library of instructional materials, and summer field-trip workshops for both teachers and students.

> Standardized tests were administered to pupils in the project schools and selected control schools in the contiguous unified rural school districts. An attempt was made to match the project schools with control (CC) schools in terms of socioeconomic level of homes, school facilities, teacher experience, type of school district organization and community size.
>
> Grades five, six, seven and eight were the focus of the testing program in order to analyze progress of the pupils in the project schools and to compare this progress with the control pupil population.
>
> Since not all teachers in project schools participated in the project, the pupils in grades 5, 6, 7 or 8 taught by non-participating teachers were evaluated separately and constitute an experimental-control (EC) group within the same school, community, socioeconomic environment and in some cases the same family.
>
> The experimental classes E_5, E_6, E_7 E_8 were taught in self-contained classrooms while the experimental classes E^*_7 and E^*_8 were taught in departmentalized classrooms.
>
> Examination of the tests of significance of difference between means for these grade levels provides a basis for the following tentative conclusions:
>
> (1) Both experimental groups did show significantly higher posttest means on the TOUS tests than did the control-control group in grades seven and eight.
>
> (2) For grade eight, significantly greater gains in mean scores on the STEP test were made by the experimental groups than by the control groups.
>
> (3) For both the seventh and eighth grades, no significant differences were found in gain in mean scores or the means on TOUS or STEP between the group which was taught in self-contained

classrooms and the group which was taught in departmentalized classrooms.

The mean test scores achieved by the three groups on the Otis Quick Scoring Mental Ability Test (OTIS); Sequential Test of Educational Progress (STEP); and the Test on Understanding Science (TOUS Form Ew) indicate, upon analysis, that the project group made significantly greater gains in test scores than did the control group.

Evaluation of student performance in the various tests administered as a part of this project clearly indicate that students who received science instruction from teachers participating in this project scored significantly greater gains in test scores from pre- to posttesting than did students who received similar science instruction from teachers not served by this project.

As part of the program, selected teachers have enrolled in college credit science courses and have added significantly to their background in science. Twenty-five teachers are using the Introductory Physical Science (IPS) materials in grade 8 of their respective schools. More than twenty Elementary Science Study (ESS) Units have been used at various grade levels by project teachers and an effort is now underway to determine the appropriate grade placement in project schools of each of these ESS units.[1]

Project Opportunity

Project Opportunity is a plan conceived by a group of admissions officers of Southern colleges and universities working with the CEEB, and with the support and cooperation of the Southern Association of Colleges and Schools. The project "unites a group of colleges and schools in an effort to prepare economically disadvantaged, yet academically talented, young people for admission to higher education." Including 14 secondary schools from eight Southern states, the project began in 1964 by selecting "those seventh graders most academically talented."

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[1] Project Headquarters, Kansas State Teachers College, Emporia, Kansas.

One of the goals of the Project is to reduce the dropout rate in the participating schools, especially among academically talented. Table 3 (from the text provided--not included here) reveals that there are striking differences in the retention rate among the various centers. (Each Project school has its own local advisory committee). In Mobile, it was decided by the local committee to drop any student from Project Opportunity who could not meet the entrance requirements for the college preparatory program at these schools. The basic requirement was an average score which placed the student at the 50th percentile on the National Educational Development tests. Unfortunately, about half the originally identified students from group two failed to meet this standard and were dropped.

It is disturbing to note that already some students have dropped completely out of school. Although the percentage figures are low, these students are the ones that the Project was trying to reach. The proportion transferring to non-Project schools is highest in centers located in large urban areas. In small rural communities, students frequently have transferred to other schools in the same system.

What is the scholastic aptitude and achievement of Project students as compared to other students? As measured by the Sequential Tests of Educational Progress (STEP) and the two parts of the School and College Ability Test (SCAT), (1) a generally higher percentage place in the top quarter on the verbal section of SCAT than on the quantitative. Verbal ability among disadvantaged students has often been thought to be less well-developed than quantitative skills; ability tests that are largely verbal in content are often indicted as being unfair for children from disadvantaged backgrounds. The data here do not support either of these assumptions. (2) Among the achievement tests of STEP, the science test seems to offer the greatest difficulty for these students. In four of the 11 centers it is the science test, among the six STEP tests, that places the smallest percentage in the top quarter. Many of the schools serving these students have only recently acquired adequate science laboratories and equipment; if there is an area of deficiency in the skills possessed by the elementary teachers who have taught these children, it is most often in science. (3) One area of the communicative arts (reading or writing) is always the best in terms of these students' placement in the top quarter of the tests. The writing test of the STEP places emphasis on mechanics, a skill that has apparently been learned relatively well by these groups. (4) Even among these selected Project students the proportion placing in the top quarter (on all tests) is relatively small. Only in four centers does the percentage consistently go above the 25 percent that would be expected of a typical unselected group of students. (5) There are wide differences among the centers with respect to the educational attainments of their top students. Fifty-six percent place in the top quarter on science at one center, while only five percent do so in another; sixty-three percent of the students in one center are in the top quarter in writing, while in neighboring centers there are only twenty-five percent. (6) Differences do not seem to be related to the racial characteristics of the students. The percentage in the top quarter from a Negro center, is generally as high as the percentage in the top quarter in white centers in Eastern Kentucky.

Within Project Opportunity, there is an increasing awareness that 'something is happening in education,' and an increasing desire to be part of it.[1]

Subjective and Quantitative Data Illustrating Outcomes of Shared Service Activity

Far more common than statistically defensible data is that area of evaluation referred to as subjective assessment. In this approach, opinion and reaction is most commonly utilized. Common, also, is a simple tabulation of the times an activity was conducted or the number of participants. The following projects illustrate this type of assessment, but should not be interpreted as less valuable. For some projects, and for some purposes, the involvement is more important than many sophisticated statistical tests could ever be.

Because nearly every project identified by this study was able to provide subjective evaluation, the following should not be interpreted as a complete listing, but rather as a sampling of the kinds of information generally available relative to most projects.

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[1] Donald C. Agnew, Director, Educational Improvement Project, Southern Association of Colleges and Schools, Atlanta, Georgia.

A Cooperative In Elementary School Guidance

In Monroe, Washington, an Elementary School Guidance Cooperative For Small School Districts originated under Title III (ESEA). The purposes and program objectives were:

(1) to provide an opportunity for children to develop to their fullest potential through early identification and the effective handling of their adjustment problems.
(2) to sensitize teachers to the need of individual students through (several means), and
(3) to aid parents in better understanding their children so they might accept them in terms of their levels of maturity, abilities, interests and potentialities.

Included in their "first year" evaluation report is the following:

> An evaluation by the principals of the counselors' services at the close of the first calendar year of service is included in (the following table).

EVALUATION OF THE COUNSELORS' SERVICES[1]
BY BUILDING PRINCIPALS

1. Ranking of services administered by counselors.
   A. Working with homes
   B. Teacher contacts
   C. Individual contacts
2. Additional services desired.
   A. Counseling chronically absent
   B. More counselor time per school
3. Is enough counselor time provided for your building?
   Yes 3
   No 6
4. Do you feel this service will find its way into the permanent staffing of your district?
   Yes 7
   No 2
   Why? Do not see how it could be funded at present.
5. In which of the following skills do you find your counselor most proficient?
   A. Behavior problems
   B. Teacher consultation
   C. Parent and community contacts

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[1] Verne Fankhouser, Director, A Cooperative In Elementary School Guidance, Monroe School District, Monroe, Washington.

(Continued) EVALUATION OF THE COUNSELORS' SERVICES BY BUILDING PRINCIPALS

6. Recommendations of principals for additional training of their counselors.
   A. Tests and measurements
   B. Work in curriculum development

As Verne Fankhauser noted when he provided this study with the information requested, "although the evaluation study may not be statistically significant, it does provide information in areas helpful to us."

Cooperative Educational Service Agency # 5

With headquarters at Elmwood, Wisconsin, CESA #5 provides the following services to its constituent school districts:

> During the 1967-68 school year, five speech therapists were employed. The services of these five people were in turn contracted to fifteen school districts.
>
> A school psychologist has been employed during the year. From fifteen school districts, 303 referrals for learning evaluation were made. Of those evaluated, 71 were neurological, 113 were emotional. Thirty-three were re-evaluated during the year for classes for the mentally retarded. Three children were recommended for institutional placement.
>
> Bid buying of school lunch supplies. There were three bids for school lunch groceries and other supplies used in the school lunch program this year. Savings on bid buying run from 6 percent to 12 percent.
>
> Bid buying of school supplies. Items of general school supply, paper items, office supplies, art supplies, athletic supplies and first aid supplies were purchased through cooperative bidding. The bid list had a total of 450 separate items. It has not been possible to make comparisons as to the savings made. Total amount of bids exceeded $32,000 this year.

Preschool workshops in modern mathematics and English were held in eight different centers for eighteen school districts.

During the year a project for federal funds under Title III (ESEA) was written and submitted for approval. The project entitled "Improving In-Service Techniques" was approved.

An application for federal funds under Title VI (ESEA) was made during the year. Funds are for handicapped children programs. A grant was approved to identify children in CESA 5 who may be suffering from any type of handicap that would impede or interfere with normal learning patterns.[1]

Center For Children With Learning Disabilities

With central offices at Geneva, Illinois, nine school districts of Kane County have cooperated to "assist the classroom teacher to deal effectively with children with learning disabilities."

As of mid-March, we have worked with 32 children in the full context of the previously described policies and procedures. We have worked with an additional 30 children at two subcenters in which the remediation was planned for small groups rather than individuals.

Subjective judgment at this time indicates that self-image, self-confidence, acceptance by peers, etc., has definitely improved with virtually all students. Improvement in traditional academic achievement has not been as noticeable in most cases.

The consultive process for the teacher of a child receiving direct diagnostic and remedial services is a continuing one. To date, in only four of the thirty-two cases has the active consultive process been terminated. In these four situations, all cases were referred to other agencies after work at the Center was completed.[2]

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[1] Louis F. Berg, Coordinator, Cooperative Educational Service Agency No. 5, Elmwood, Wisconsin.

[2] Office of County Superintendent, Kane County, Geneva, Illinois.

Camp Bristol Summer Camp

Described earlier, Camp Bristol, Colorado, provided encampments for culturally disadvantaged, handicapped students, dramatic aspirants, and science enrichment studies.

> In evaluating Camp Bristol it was necessary to obtain the impressions, likes and dislikes to the campers, the teachers, and administrators, as well as the camp personnel.
>
> In an effort to determine the success of the camp and the degree to which fourth, fifth, and sixth grade campers liked camp, the campers were asked two relevant questions:
>
> | | Affirmative | Negative | Uncertain |
> |---|---|---|---|
> | Did you like Camp Bristol? | 100% | | |
> | Would you like to attend Camp Bristol again? | 96% | 2% | 2% |
>
> When asked if the campers missed home, 51 percent stated they did miss home to some degree.
>
> In an attempt to determine why the campers accepted the camp to such a high degree, they were asked what they liked most about Camp Bristol. The three most frequent responses were:
>
> 62% liked the horses the most
> 8% liked hiking most
> 7% liked the games and sports most
>
> The campers were asked if they made any new friends during their camp experience, the response to this question was 100 percent affirmative.

A great deal more data is available relevant to the accomplishments of Camp Bristol Summer Camp, but the foregoing should be sufficient to illustrate the kind of information collected, as well as the reporting procedure.[1]

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[1] F. K. Howerton, Adama State College, Alamosa, Colorado.

SUMMARY

Although little statistical evidence exists to describe the outcome of shared service activity, that which has been generated demonstrates a movement of behavior in favor of the shared service. To the extent which opinion data has value, the experience of the researchers involved in this study is recorded. From interviews with more than one hundred and twenty persons judged to be conversant with one or more shared service activities, not one negative attitude was evidenced. A 100 percent favorable response should be regarded as significant in any study. (Among these persons were project directors, local school administrators, classroom teachers, school board members, legislators and four students who were participating in the Seminars for Able and Gifted Students from Krum, Texas.) In fairness, some administrators were reluctant for a variety of reasons to accept the services offered by regional cooperatives, but even these acknowledged the benefits that accrued to the students involved.

Because statistical evidence to support or deny the advantages small schools can obtain from sharing services is scarce, it should not be construed that shared services projects have not proven themselves. Rather, it illustrates at least two factors which must be recognized, (1) measurement of sociological behavior is still in an embryonic stage, and here, more than in many other areas of testing, the instruments used to gather information often do not evaluate the behaviorism subject to investigation, and (2) the lack of statistical data has often been a product of inadequate resources--several personnel involved with these projects have indicated that where a choice had to be made regarding allocation of resources, the first choice would be to provide more services to youth and evaluation second.

If involvement and the provision of services otherwise unavailable can be used as criteria, then shared services must be regarded as completely successful. The only factor detracting from this conclusion is the knowledge that many more services are needed for many more students and teachers than are now available to them.

CHAPTER VII

FINDINGS, IMPLICATIONS AND CONCLUSIONS

Introduction

The "Rural Shared Services Project," U. S. Office of Education contract number OEC-0-8-080583-4532 (010), under which this study was conducted has been an effort to identify, synthesize and evaluate shared services research and development efforts conducted throughout the nation, and bring those results together in a single report. This chapter will condense the findings reported earlier, discuss the implications of shared services for rural education, and set forth some conclusions arrived at by the investigator.

Findings

The findings of this study can be classified broadly in five categories: (1) qualitative (2) quantitative (3) economic (4) control and (5) opinions of rural leaders.

Qualitative Results

Under this classification is a condensation of those reports that show, statistically, a change in behavior of persons involved in a given project. Although limited in number, some projects were rigidly controlled and subjected to effectiveness measurement--in each such study located, the results were in a positive direction toward improvement of the behavior under examination. The following categories (reported in Chapter VI) summarize the behaviors which indicated positive effects from shared services.

(a) Teacher inservice training--a higher response toward adoption of this activity was evidenced.

(b) Guidance and Counseling--a higher adoption value was given such service.

(c) Psychological and Social Worker Services--were regarded as significantly more valuable by the experimental group.

(d) Willingness, on the part of teachers, to look at "new" ideas--a movement from a conservative to a liberal tendency was observed.

(e) Physics at the secondary level--"the cooperative use of Harvey White physics films in small rural high schools can upgrade the teaching of high school physics as measured by student achievement."

(f) Research as a basis for decision-making--school boards and teachers did modify their behavior in the direction of a greater interest in and dependence upon research for curricula and instruction.

(g) Science in the elementary school--the mean test scores indicate that the project group made significantly greater gains.

(h) The "holding power" of the school--"there is an increasing awareness that 'something is happening in education,' and an increasing desire to be part of it.

(i) Enrichment for superior high school students--"only five of the one hundred in literature and ten of the seventy-five in mathematics have failed to complete the program."

Quantitative Results

Of the 215 projects reported in the second supplement of this report, Locations of Shared Services Projects, each can now demonstrate expanded educational services as compared to those which existed prior to formation of the project. Chapters II through V of this report described seventy-one different kinds of activities made possible through the adoption of the shared services concept. Roy Brubacher's comment, however, is worth repeating here: "The variety of services that can be provided is limited only by the imagination of those persons involved."

That more services are being provided to more students and teachers is typified by the report of Project Mid-Tenn, Nashville, Tennessee:

> The Children's Museum...in cooperation with Project Mid-Tenn designed and developed a mobile museum, utilizing the theme "Tennessee and the Sea." The basic purpose...is to extend to

school children and teachers outside of Nashville the enrichment offered by the museum. Starting in September 1967, the museum's contribution to innovative education was taken to 131 schools in 18 systems, and involved 31,000 pupils during that school year.

The transport trailer is driven by two young women who give brief presentations to each group of children observing the exhibit and, also, according to each teacher's wishes, make classroom presentations on various subjects related to the mobile museum's basic theme.

Economics of Shared Services

A basic consideration of any educational modification centers on the costs of such change. Findings of this study indicate savings up to 25 percent on the purchase of audiovisual equipment have been realized by one project. In another, cooperative bid buying of school supplies has produced savings of 6 to 12 percent.

Evident to the reader must be the realization that provision of additional services will require additional expenditures for those services. However, it can be shown that through cooperative purchasing--of a service or a commodity--the service can be made available less expensively, and frequently of higher quality, than would be possible by individual acquisition.

Another option of sharing services includes the possibility of providing many of those services now being offered at a lower per capita cost, thus releasing previously allocated funds for the purchase of other priority items.

Control Information

Perhaps more prevalent in rural communities than elsewhere, a desire exists among the citizenry to maintain local control of their schools. Charges are frequently leveled against such an attitude as not being in the best interests of youth. Shared services can demonstrate an improvement in the quality of education within such schools with no loss of autonomy by the local district.

Some readers will criticize that statement on the basis that it will impede consolidation and/or reorganization efforts. But even those persons will acknowledge that some schools are too geographically remote to effectively consolidate. They will often grudgingly acknowledge that some communities are simply not going to reorganize of their own volition--for these they urge mandated accomplishment. They will acknowledge, too, that merger with nearby districts may still produce nothing more than another small school. The contention of these critics--and they have evidence to support it--is that small schools are not providing the educational opportunity available in larger schools.

Whatever the charges and counter-charges may be, the fact remains that many children are now attending small, remote schools and these children can be provided richer educational experiences through shared services--they cannot await the luxury of reorganization.

Included among the findings is evidence that many of the activities being conducted under the direction of shared services projects could be implemented individually. The need for cooperative effort is not an essential to utilizing such educational practices as modular scheduling, supervised correspondence course offerings, multiple-class instruction, nongrading, organization, etc. Given the information, any single district can adopt these practices alone--and information exists to support the premise that these efforts produce improved educational opportunity.

Opinions of Rural Education Leaders

This study included interviews with more than one hundred twenty persons who could be regarded as knowledgeable and conversant with rural education. When confronted with the proposition of shared services, at least four beneficial results were frequently mentioned.

(a) Shared services create an awareness among local school board members of the value of such activities as inservice training for teachers, research findings and newer educational developments.
(b) Shared services tend to involve the "isolated" administrator in finding new solution to existing problems.
(c) Shared services tend to create a renewed interest in education among citizenry of the community.
(d) Shared services provide needed educational services for rural youth with no loss of autonomy to the local district.

Implications

One of the problems to be considered by this study dealt with the question of whether shared service activity leads to school district consolidation and/or reorganization. Some persons interviewed felt that it did in some cases. They were unable, however, to document specific cases. None of those interviewed felt they could credit shared service activity as the primary cause since numerous factors entered the picture where reorganization did develop among cooperating districts. The more prevalent consideration leading to reorganization seemed to be an economic one--that fiscal economy could be realized from the larger purchasing power. Many of those interviewed indicated that sharing services diminished the reasons for reorganization--they believed the local districts could now provide many services previously thought to be available only to consolidated and large districts.

Ray Jongeward and Michael Giammatteo completed a study of shared services and their relationship to reorganization in the State of Washington. Among their findings was the statement:

> Reviews of the source document collected, notes from interviews with State Department personnel, and the replays of the tape interviews provide little supportive evidence of the hypothesis that the greater the number and extent of shared services among and between local school districts in the State of Washington, the more probable will be school district reorganization.[1]

One could imply that shared service activity has little effect on whether districts do or do not reorganize.

A second implication recognized by this study has to do with the need for a more highly developed channel of communication among rural educators. While projects were located which were, in fact, providing stimulating and exciting educational programs, only a limited number of their colleagues were aware of those programs. ERIC/CRESS (Clearinghouse for Rural Education and Small Schools) is apparently making some inroads into this problem, but it is too early to assess their total impact. This writer received the impression that some nationally coordinated organization could effectively reduce this communications deficit. Most frequently mentioned as the organization to provide this service was NFIRE (see Chapter II). The unique advantage possessed by this organization appeared to be the physical presence of a representative in each region of the United States--someone near enough to provide person-to-person assistance in solving the problem of the local district. Regional Educational Laboratories are also making extensive progress in reducing the communications barrier, but it is evident that much remains to be done.

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[1] Ray E. Jongeward and Michael C. Giammatteo, "Shared Services and Their Relationship to School District Reorganization (Consolidation)." A Working Paper Prepared for Program 400: Improving Education in Small Schools, Northwest Regional Educational Laboratory, Portland, Oregon, June 29, 1967.

Numerous projects were originated with funds available under Title III-(ESEA). The termination of many of these projects when Title III funds are withdrawn seems to indicate that continued funding from federal sources will be necessary if the projects are to be perpetuated. Implied is the unwillingness of local districts to finance such endeavors through local taxation. Two considerations must be offered here to challenge that implication: (1) many states do not have legal provision whereby local districts can jointly fund such activity--thus preventing their continuation, and (2) in communities of limited industrial wealth, the burden of educational costs reverts to the land holder. Most will recognize that small communities typically do not contain industrial wealth.

Perhaps the most important implication to be drawn from this report is the realization that small schools can be good schools--given the proper leadership, and qualifying that such leadership is in possession of information which can offer improved educational opportunity. Through working together and sharing services, good schools can become better schools.

Conclusions

A study of this nature inevitably leads one to develop attitudes and insights--many of which could not be defended empirically--but are none the less perceived as reality. Some of these are presented here as a challenge to future investigations to substantiate or refute their validity.

(1) The greater the geographical remoteness of a school district, the greater the desire to maintain local autonomy. The greater the remoteness, the more likely such districts could benefit from cooperative efforts. But the more local autonomy is cherished, the less the likelihood that districts will avail themselves of ideas presented by others.

(2) Sharing educational services often causes administrators and school board members in rural communities to re-examine their existing educational programs, and to search for new ways of providing a comprehensive program.

(3) Many educators feel they must begin their careers in rural schools in order to gain professional maturity--at which point they can migrate to larger and more prestigious schools in urban centers. They fail to develop a commitment to serving rural youth.

(4) There are characteristics of teaching in small schools that could be capitalized upon which would enhance the self-satisfaction a teacher needs to realize contentment in his position--characteristics which would encourage capable teachers to remain in rural schools. Colleges need to devise teacher training programs uniquely oriented to rural teaching.

(5) A small, but highly motivated, group of individuals are concerned with and working to find solutions to problems of rural education. Such individuals are numerically disproportionate to the number of youth that must be served in rural schools.

(6) One motivation to serve as an administrator in a remote district stems from a desire on the part of that administrator to maintain and direct his own "empire." This desire obstructs the objectiveness of these persons in assessing the values to be gained from cooperative effort. These same persons--as a group--comprise the highest percentage of nonattenders at local, state and national conferences, and consequently become the group least informed of new practices and strategies which can benefit the instructional programs of their schools.

(7) Communication with rural educators is a primary deterrent to the development of a quality educational program in rural schools.

(8) Improved articulation of educational developments has been realized through the establishment of regional intermediate units. Such organizational patterns can be of great assistance in bringing greater educational opportunity to rural youth.

(9) While the phrase "rural America" holds a romantic, nostalgic, "Horatio Alger" connotation for many urbanites, to the educators in communities of 500 to 15,000 the implication that they are anything less than "metropolitan" is offensive. To attempt to discuss "rural education" with such persons frequently results in his disinterest. However, such persons are willing to discuss education in general terms, and education in specific terms where their own districts are concerned. The point to be made is that if one is desirous of effecting change in rural schools, he will need to find some term other than rural to describe that which he wishes to change.

(10) While this very study is evidence of the fallacy to their thinking, many rural educators have the feeling that--as far as federal assistance in solving their problems is concerned--they are truly "the people left behind."

(11) The adoption of the concept of shared services by local school districts, with no loss of autonomy to local districts, is an effective alternative to consolidation and/or reorganization in providing needed educational services to rural youth.

William Trow has added a final thought which warrants consideration. While he was addressing himself to the issue of technology in education, one could apply the same reasoning to shared services.

> It is of first importance that the means should not determine the ends. We should certainly not base our curriculum on what can be taught by television or teaching machines, or for that matter, by books or projects. This would be a prime example of getting the cart before the horse. Both old and new methods must be scrutinized to discover the best ways to attain the objectives sought.[1]

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[1] Trow, William Clark, Teacher and Technology: New Designs for Learning. New York: Appleton-Century-Crofts, 1963.